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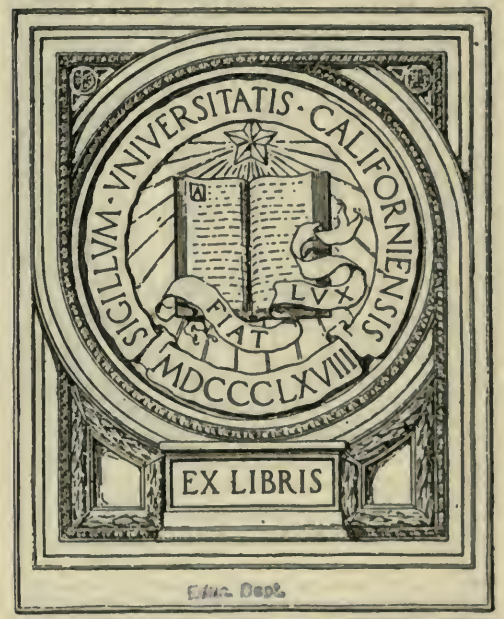


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# Methods of Teaching Typewriting

*(With Keys to Rational Typewriting)*

By RUPERT P. SoRELLE
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# PREFACE

Typewriting is a subject that necessarily must be *taught*, if the quickest and most lasting results are to be obtained. This fact has not been commonly appreciated by either the teachers themselves or the schools. As a natural result comparatively little constructive thought has been given to the development of teaching methods in typewriting until very recently, and no attempt heretofore has been made to prepare a manual for the use of teachers of the subject.

The Teaching of Typewriting does not pretend to exhaust the possibilities of the subject; but it will assist the teacher in organizing and making more effective his work, and is a step in the direction of encouraging a deeper and more scientific study of the teaching of a subject that is daily growing in greater importance in the commercial education field.

While the present volume has been prepared primarily for users of the Rational Typewriting textbooks, it will be found to contain methods and suggestions that will be of practical value to all teachers of the subject, no matter what text is used.

For convenience, the subjects of the book have been discussed under four general heads: Factors of Interest Value; Teaching Methods; The Technique of Typewriting; and Detailed Outlines and Suggestions for handling the various editions of the book. A number of plans for handling the different editions are submitted, which are flexible enough to meet the needs of both public and private schools.

In addition, the book contains the answers to the constructive and "arrangement" problems of both the Revised and the Medal of Honor Editions.

It is the hope of the author that the book will stimulate teachers of typewriting everywhere to strive to develop methods of teaching to the highest possible point of efficiency. He will be glad to discuss with teachers any problems that arise in their work.

RUPERT P. SORELLE



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# METHODS OF TEACHING TYPEWRITING

**The Teaching of Typewriting:** In selecting and discussing the points to be considered in the teaching of typewriting the *interest value* of each point is considered of supreme importance. With interest awakened and maintained, the other problems will be found to be easy of solution. The teacher who would secure the greatest and the most lasting results, therefore, will need to devote his constant attention to the interest his teaching develops. Many of the topics have been introduced specifically for this purpose. All of them are susceptible of individual variation.

**Motive in Studying Typewriting:** The typewriter is a recognized instrument of utility. The value that is attached to skill in operating it is the dominating motive that induces a study of the art. Skill in operating the machine has developed into an attractive and remunerative vocation. The typewriting teacher can make wise use of this fact in his teaching, in conserving the initial enthusiasm of his students, in inspiring them to attempt earnestly to achieve the best results, and in keeping them up to the highest standards.

Since the majority of students, by electing to study the subject, have already been "sold" on this feature of the art, they come to the teacher with a great deal of natural enthusiasm. This enthusiasm should be maintained by empha-


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sizing the vocational side of typewriting, and by keeping before the student opportunities offered for advancement through the direct association it gives with business and professional men with whom the typist comes in contact. Many of the collateral aids mentioned in the handbook have an important bearing on this. Another group of students can be appealed to on the ground of the personal value of typewriting as a time-saver in doing one's own writing, its greater power for expression, its legibility, and its speed.

The object of all the teacher's effort along this line is to strengthen motive, and to increase the desire to excel.

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## FACTORS OF INTEREST VALUE

**The Machine Itself a Factor of Interest:** The typewriting machine possesses an inherent fascination to the average student. It makes an appeal like every other instrument that "works." At first a mystery, the student at once wants to solve its mechanical functions—wants to write upon it—and this desire should be satisfied as soon as practicable. The first lesson should contain some drill which enables the student to operate the keys—even though in an elementary way; but not to such an extent as to start the formation of habits that cannot become a fixed feature of the instruction in operating the machine, even in the most advanced stages of writing. Interest in the mechanics of the machine can be kept alive by progressive studies in the functioning of the various parts, and by demonstrating the usefulness of each feature. The ultimate aim in typewriting is *speed with accuracy,* hence the value of each mechanical feature of the machine in helping to achieve this end should be directly connected up with the instruction on these features.

**Interest That Comes from Physical Expression:** The typewriter offers an unusual opportunity to satisfy the student's desire for physical expression. The normal adolescent child experiences distinct pleasure in the discharge of physical energy. This is exemplified in the enthusiasm with which he enters upon all games in which success depends upon physical dexterity or skill. Executing the physical movements necessary in operating the machine, if accom-

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panied by accurate results, is an analogous situation. The teacher will have little difficulty in making use of these principles if he studies the personnel of any class group and considers the application of the principle to the individual.

**Acquirement of Technique:** The interest that is developed in the mechanics of the machine can be quickly extended to include the operation of the keyboard. It may be safely assumed that the average intelligent student of typewriting is ambitious to operate it in the correct way. This is true of all arts. The man who wants to play tennis or golf is naturally anxious to excel. He wishes to play in "form," and can easily be induced to practice most diligently to acquire correct form, if you can convince him that the way you recommend is correct. The attempt on the part of the student to acquire correct method of operation develops an interest that grows, and the experienced teacher makes use of it to encourage and to get him through difficult phases of the work that would be impossible without a strong motive. The teacher can point out the futility of any other consideration, because typewriting for the majority is a vocational acquirement, and the highest skill can be attained only by writing in a scientific way. The scientific way, incidentally, is easier. The "reason why" in teaching technique should constitute an important part of the teacher's instructions.

There is a very important educational value to be obtained by awaking the student's interest in the technique of typewriting as a distinct problem. It requires a great amount of concentrated attention. If it can be so arranged by the teacher that the student's attention is voluntary, much is to be gained. It takes the student away from other thoughts which perhaps are reducing his efficiency. It makes him forget that there is anything in the world for him but the one

problem of working out the problem of technique. The tasks given him should be such, however, that he can accomplish with a high degree of success. There is no factor in the learning process that has a greater influence upon progress and efficiency than successful accomplishment of tasks undertaken. Discouragements must be avoided. This means that much attention by the teacher must be given to the individual temperament of the student.

**Speed and Its Development:** Speed in writing on the typewriter has without a doubt the most powerful appeal of any feature of the study. It is the natural appeal that makes a man—and especially a young man or a youth—want to drive an automobile to the limit of its speed capacity just as soon as he feels confident in steering it—and sometimes, disastrously, before. This desire is not wholly a masculine attribute; it is found in girls as well as boys. The natural desire of the student to excel should be made use of in teaching. It should be encouraged, but controlled tactfully. The student should be shown how the matter of speed is a growth. By mastering the steps which build the foundation for speed, the goal can be reached with certainty and much more quickly than in any other way. The student can be easily induced to spend hours in mastering certain technical difficulties of fingering, for example, if he feels that in the end it will give him *speed* in writing.

The problem of speed development is one that opens up a multitude of interests in the technique of typewriter operation. It offers the teacher an opportunity of getting "quantity production" in practice, and quantity production if accompanied by wisdom in the selection of material which has a definite purpose in the training is the secret of typing skill. This question will be discussed more fully under the topic of "Teaching Devices."

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**The Appeal of Overcoming Difficulties:** Contrary to the opinion of many teachers with whom I have talked, I am convinced that the difficulties in learning typewriting—and some of these *are very real* and might just as well be faced—make a distinct appeal to many taking up this work. No one likes to win easily. The independent, upstanding, self-reliant person likes to meet a foeman worthy of his steel. This feature of the study has many possibilities for the teacher. It does not mean that difficulties should be sought, nor that the problems should not be simplified by skillful management and analysis. And the principle cannot be applied to all students. A recognition of this latter fact will enable the teacher to give encouragement wherever needed, but to put the student on his mettle whenever the occasion requires.

**Accuracy, Its Interest:** There will be a class of students whose natural tendency is to do things right. Accuracy in such cases is taken care of almost automatically. With the others it will be necessary for the teacher to devise ways of creating an interest in accuracy. Constructively, this can be done by appealing to the student's moral sense of truth. The worthlessness of inaccurate work can be utilized to show the futility of not striving for correct fingering, correct manipulation of the various mechanical features of the machine, and correct copy. As illustrations of the penalty inaccuracy imposes, two concrete examples may be used.

1. Inaccuracy of manipulation slows speed perceptibly.
2. Errors in manipulation tend to perpetuate themselves.

An illustration of this is that if we mispronounce a word or use it incorrectly we oftentimes catch ourselves subconsciously repeating the error, only to discover our error upon *hearing* the word. An error in striking a key makes the employment of an eraser necessary. Ten to fifteen correct

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words may be written in the time it takes to correct a mistake. Errors are costly. These are lessons that are very easy to impress upon the student because they can so readily be demonstrated.

**Artistic Features of Typewriting:** The beauty of the correctly written, artistically balanced page with even impression of the type can be utilized as an interest-awakening feature. This can be very greatly increased by having all examples of typewriting from which copies are to be made, or which are to be used as models, conform to the best taste. The teacher can point out the reasons, and explain the artistic principles employed, to develop the student's judgment. Illustrations of printed matter, applicable to typewriting, can be used with great advantage. The constructive abilities of the student can be awakened through this means.

**Letter Forms, Business and Social—Business Correspondence:** Since the typewriter is employed primarily as a business utility, the writing of business letters will appear to the student as his ultimate goal. Their interest value lies in this fact. For this reason they should be introduced as early in the course as is practicable, but the necessity of a correct fingering technique should never be overlooked. There should be no rush to get into this work. Social letters can be introduced earlier, and will satisfy the student's desire to utilize his new found accomplishment. As these forms are simpler they should perhaps precede the business letter forms. In teaching the letter forms, the teacher can do much in acquainting the student with the subject of business correspondence. This will lend an interest to the work that will greatly increase efficiency.

**Business Forms—Law Forms:** The reality of these forms can be utilized by the teacher to inspire a great amount of

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interest. Acquired knowledge or information to most students is a source of pride.

**Friendly Competitions—Desire to Excel—Sportsmanship:** By developing the drills mentioned in "Speed Drills—Team Competition" into class events much upon the plan of athletic events, a very strong spirit of sportsmanship can be developed. This has been found to be a powerful aid in securing results in typewriting. The principle can be extended also to all kinds of work done on the machine. Suggestions will be found for this under "Exhibits of Students' Work."

**Mental Practice away from the Machine:** The student can do much independently to increase his typing ability by visualizing the keyboard and "writing mentally" while reading, and he can make such work a definite part of his everyday practice. The mental effort of locating the keys and putting into motion the movements that make the strokes, has very marked influence on the success of these activities when the student is working at the machine. James, the psychologist, has said that "we learn to skate in summer and swim in winter" merely by going through the mental movements of these accomplishments.

**Typewritten Designs:** While the typewriter was never designed as a medium for artistic expression, in the sense that pictures can be produced upon it, there is no question that work of this kind makes an appeal to many students. It has a value in acquainting the student with the different parts of the machine, and has a special interest value. For this reason it may be introduced with profit. It should be confined almost entirely to work of a practical nature—the designing of book covers, title pages, and other things that come clearly within the sphere of typewriting.

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**Exhibits of Students' Work:** There is nothing more encouraging to a student than to find that he has produced something that wins the praise of his teacher and of his fellow classmates. Good specimens of students' work should be kept constantly on the bulletin board. It will stimulate others to try to excel. Exhibits of correct forms of various letters and documents can also be used to advantage. For example: The teacher may prepare a series called, "The Evolution of the Business Letter," showing the shorthand notes, the typed letter ready for the signature, the letter signed, and the envelope. This would have a far greater effect upon the student's mind than an hour's explanation.

**Exhibits of Experts' Work:** Many specimens of this can be obtained either from the typewriter companies or from business houses. It will serve as a stimulus. These specimens, however, should be selected with very great care. Much of the typewritten work that comes from business houses, the product of unskilled typists, is lacking in taste in arrangement, and, moreover, does not conform to the laws of efficiency.

**Collateral Aids:** The following outline of subjects that may be introduced with advantage to awaken still further interest in typewriting will be of value to teachers:

Speed with Which One's Own Thoughts May Be Typed
Interest of Steady Progress in Achievement
Development of Concentration
The Value of Typewriting in Learning the Details of Written Language
Power through Successful Accomplishment
Effect on Memory
Interest in What Others Have Accomplished, Speed Records

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Demonstrations by Experts
Inspirational Talks
Cultural Value of Typewriting; Practice Material That Has Interest, Educational and Informational Value
Motion Pictures
The Stereopticon

The topics given on the outline are so suggestive as to need little further explanation. These topics should be handled in the form of talks, their purposes being to strengthen the student's desire to learn the subject well. As an example, only one of the topics need be mentioned—"The Value of Typewriting in Learning the Details of Language." Such questions as plurals, the possessive case, spelling, paragraphing, capitals, and punctuation—all are brought to the student's attention with startling, and oftentimes embarrassing, reality the moment he begins to use the machine. They bring the student face to face with the necessity of doing things right. They make him more careful, stimulate judgment and in every way help him to improve his knowledge of the language. They give him an opportunity to visualize his knowledge. Like any other form of manual training, typewriting very quickly shows the student the difference between theory and practice.

These collateral advantages of typewriting can be made the means not only of stimulation of interest in typewriting but in the English language itself.

Another topic that will make a special appeal is that of "Power through Successful Accomplishment." A majority of the students who take up such a subject as typewriting have really never learned to do any one thing well—particularly anything which requires a high degree of manipulative or manual skill.

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The power acquired in learning typewriting and learning it well will be extended in nearly every other direction. All these matters can be pointed out to a group of intelligent students. They will at once appreciate the advantages to be derived from a thorough mastery of the subject.

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## TEACHING METHODS

**Working with the Student:** It is always an inspiration to the student to know that his teacher can do the things that he is teaching. The teacher who can sit down at a machine beside his pupil and work with him is utilizing one of the most powerful aids he can summon. He can form the center of a group of students working upon a particular fingering problem, and by encouragement, demonstrations, and enthusiasm he can accomplish results that could not be achieved in any other way. Many teachers lose all the value of this kind of instruction by not keeping up their own practice on the machine.

One of the best teachers of typewriting I have known entered all the typewriting contests of the school or the typewriter companies along with his students. It is needless to say that his example worked wonders in the school. The students became almost as enthusiastic over typewriting as they were over football and the other school athletics.

**Programs:** There are outlined in the Manual several plans for handling the different editions of Rational Typewriting. The teacher should select the plan that more nearly meets his requirements, and adapt or modify it whenever necessary to meet the exact conditions in his school. It is impossible in any Manual to lay out plans that will fit the various conditions that exist in the thousands of schools teaching the subject, and that will be in harmony with the ideas of different teachers; they necessarily must be adapted for average conditions.

The making of a program should not be left to the inspiration of the moment. The entire course should be worked


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out before the work of the term or year is started and the program adhered to as closely as possible, but a certain amount of flexibility is necessary to compensate for the variations in the personnel of the class. In a general way, the making of a program will depend upon the following considerations:

1. Personnel of the classes;
2. Length of period;
3. Length of course;
4. Average age of the students;
5. Previous training, if any, in any manipulative art;
6. Equipment;
7. Outside practice periods.

In the making of the program careful consideration should be given to the time element. The teacher should endeavor to get a proper perspective of his problem; he should take into consideration the facility with which the student can grasp the different problems of learning. He should plan in advance just how much he intends to give to the different features of any recitation or practice period and endeavor to accomplish it in full in the time allotted. Much time is wasted in trying to follow a vaguely conceived or imperfectly worked out program.

The teacher is cautioned against trying to attempt too much. If the program is made too ambitious, he will find himself constantly falling behind and this will disrupt his organization. If the teacher plans to give ten minutes to a speed sentence, he should close the matter at the end of ten minutes. In other words, do not let one feature overlap so far on another that it will be impossible to give the second proper consideration.

Programs should be varied. The element of surprise is desirable; it keeps the student constantly alert, and introduces a spirit that makes for better work all around.

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**Importance of Constant Supervision:** There is hardly any subject that requires closer and more constant supervision than typewriting. This is especially true in the early stages. Skill in operation depends almost entirely upon the kind of habits formed, both mental and motor. The teacher may be ever so painstaking in demonstrating the points he is discussing, but it is quite another matter for the pupil to put the instruction into practice. The supervision should be given in a way that produces the minimum of interference with the student's carrying on his work unhampered by the feeling that he constantly is being watched, for this diverts him from his task. Nothing is more detrimental to the *esprit de corps* of a class than an attitude of criticism on the part of the teacher. Criticism should always be constructive. If the teacher discovers a student performing an operation in an incorrect way, it is much better to say quietly, and with a tone of encouragement, "I have discovered a more effective way of doing that; let me show you," than to upset him by criticism, however mildly expressed.

Teachers as a rule do not appreciate the importance of getting the student started right and kept right by proper supervision. The teaching of typewriting is a neglected art. The apparent simplicity of typewriting—and the fact that teachers themselves have forgotten their own experiences in learning, perhaps—accounts for much of the lack of emphasis given to supervision.

To operate a typewriter correctly and successfully is not an easily acquired accomplishment: It involves highly complex processes. The more clearly the teacher understands the problems involved, the more quickly he will appreciate the difficulties and discouragements the student is meeting.

The student becomes a good or a bad typist in the first few weeks in school. Consequently, this period in his ex-

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perience should be the subject for much thought on the part of the teacher. Each student presents a different problem. The reaction of different individuals differs widely. Habits of thought or action previously acquired influence progress. These are matters for analysis on the part of the teacher. He can discover them and correct them only by close personal observation of each student, and sympathetic assistance.

**Value of Demonstration and Illustration:** Illustration of any point in learning typewriting is far more effective than any amount of explanation. The teacher should never lose an opportunity to use this method wherever possible. As has been stated, students of the age of those studying typewriting are naturally imitative. For the purpose of making all demonstrations clear, the teacher should have for his own use a machine mounted on a swivel table, or stand provided with casters so that it can be moved from place to place. He can gather around him a small group of students and explain the working parts of the machine or points in technique with a clearness that would otherwise be difficult. The stand should bring the machine high enough to make it possible for the teacher to operate it while standing, so that a large group of students may watch the demonstration at one time. In explaining the proper position while sitting, another machine can be used. The features that lend themselves most readily to demonstration are:

1. Position at machine;
2. Position of hands and arms;
3. Touch:
    a. Getting hand in position after carriage return;
    b. Making the reaches;
    c. Economy of movement;
    d. Rhythm;
    e. Even impressions.

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4. The mechanical operations of the machine:
   a. Spacing;
   b. Carriage return;
   c. Mechanical features;
   d. The scales;
   e. Printing point;
   f. Adjusting paper;
   g. Adjusting marginal stops.

**Blank Keys—Shields—Aprons:** Such mechanical devices have a value in teaching with certain classes of students. Their principal value is to be found in the following:

Blank Keys—are valuable only in forcing the student to *memorize the keyboard.* They have no value beyond that, and can not be considered as a substitute for teaching typewriting.

Shields—are a better device than the blank keys, but they have many disadvantages. They force the student to write by "touch" but do not offer the teacher an opportunity to observe the method of operation used by the student.

Aprons—serve the same purpose as shields, and have the same disadvantage. They have the advantage of giving the student free play in handling the machine.

All these devices, if used at all, should be dispensed with as soon as possible. They should not be used with all students. With the more mature students, who have stronger will power, such devices will not be necessary at all, perhaps. If the teacher has the power to control the methods of operation of his pupils, more rapid progress can be made without the devices mentioned, but only teachers of unusual personality and control of their students can achieve this.

**Charts:** Every typewriting room should be provided with a set of wall charts of the keyboard of the machine. Preferably these should be in harmony with the keyboard charts

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given in the Rational Typewriting text, beginning with the first lesson. The following are suggested:

Full keyboard of the Remington;
Full keyboard of the Underwood (see page 4, Revised Edition);
Full keyboard of the other machines used.

The foregoing charts should be ruled off into finger divisions to enable the teacher to give preliminary explanation of the keyboard as a whole.

Divisional charts should be provided as follows:

First finger divisions (see page 9, Revised Edition);
Second finger divisions (see page 11, Revised Edition);
Third finger divisions (see page 13, Revised Edition);
Fourth finger divisions (see page 15, Revised Edition).

The divisional charts also should be ruled off for the finger divisions, and no other keys than the ones under discussion should be shown; but the whole keyboard, blank except for the keys of the division, should be illustrated so as to enable the student to visualize the locations. The guide keys should be included on all charts.

Figure and special character divisional charts should be provided as follows:

One showing the figures with the upper characters obliterated to focus attention on the figures (see page 21, Revised Edition).
One showing the figures and characters in combination, (see page 23, Revised Edition).

In addition to the foregoing it would facilitate instruction on the various parts of the machine if charts could be provided showing an enlargement of the machine from various angles, such as the illustrations in the book of directions provided by the typewriter makers.

The stereopticon is used in some schools for this purpose.

Charts drawn on the blackboard by the teacher usually are not accurate enough to be of value.

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**Class Groups—Classification for Instruction:** The best work in teaching typewriting can be done where a close classification of students is possible. In the first place such a classification stimulates competition, and since all the students in a group properly classified can work at about the same speed, or nearly so, the competition becomes more productive of results. Exact classification also affords the opportunity for more intensive methods of instruction. It enables the teacher to concentrate his efforts on a few essentials in each recitation or practice period and leaves a wide margin of time for intensive drill.

Classification is one of the hardest problems to solve—if it ever is solved. It can be measurably improved in most schools by a careful analysis of the situation. Owing to the number of electives in most high school courses nowadays, the always present "special student," the student repeating a term's work, or the student who has been absent and is trying "to make it up," there are a host of influences that interfere. In the private schools, students enter at any time. The method of promotion makes reclassification a continuous problem. The problems may be discussed briefly under three heads:

*1. Classification:* This should be carried out as far and as fully as possible, even to the extent of frequently splitting up the groups into smaller groups. It will necessarily mean reducing the amount of instruction to any one group if several groups are working in the typewriting room at the same time, but it should be remembered that a few minutes of intensive effort is to be preferred to a much longer period of scattered effort.

*2. Broadening the Work of Instruction Period:* Often a large number of students that are within a reasonable distance of each other, so far as the matter of typewriting skill is concerned, may be assembled for instruction in one group and

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the instruction made to cover several of the textbook lessons. This may be supplemented by whatever drill the teacher has decided upon being given to the entire group.

*3. Individual Work:* The actual work of practice is a purely individual matter. When the instruction part of the period has been completed, students may be assigned individual practice work under the supervision of the teacher.

**Dictation Direct to the Machine:** This is a valuable device to use from the very beginning in typewriting and can be continued throughout the course with advantage.

The particular advantages of dictation direct to the machine are:

1. It forces the student to keep up with the pace of the teacher rather than to rely upon his own volition.
2. It prevents him from falling into sluggish habits of manipulation.
3. It cultivates his hearing—which is a very valuable training for both shorthand and typewriting.
4. It assists in acquiring rhythm.
5. In giving dictation the teacher can require the students to look directly at him, thus keeping their eyes off the keyboard.

At the beginning of the work the best method of giving dictation is to dictate one letter of a word at a time—not pronouncing the word. This is a valuable exercise in testing the student's ability in finding keys quickly. The words can be written on the board a letter at a time as they are dictated. The object of this is to let the student see the letter as well as hear it and to prevent confusion. By not pronouncing the word the student is kept alert to catch each letter, otherwise he would proceed with the word as soon as he anticipated what it was. Dictation on the machine has a very great attraction for most students.

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**Speed Drills—Team Competition:** As has been mentioned in the foregoing the word "speed" either in shorthand or typewriting has a magic attraction for students of these arts. It can be made an inexhaustible capital by the teacher. The following suggestions will serve to open up the possibilities of the subject:

*In the early stage:*

1. Speed drills in writing certain frequently recurring combinations or sequences of letters;
2. Speed drills in writing the alphabet;
3. Speed drills in writing alphabetic sentences;
4. Speed drills on any repeated practice material from the textbook.

*In the advanced stage:*

1. Speed drills on practice material, connected matter;
2. Speed drills on new matter; at first, on matter of low stroke-intensity.

In the early stage the matter can be given to the entire class group. In the later stage, the students should be grouped according to ability—those in each group working in competition with one another. Teams can be organized in each group to stimulate competition. The teacher can make the most effective use of these competitions by the employment of a bulletin board with the names of competing teams, students, etc., with the records of their achievements. Many of these diagrams can be in the form of graphs. See illustrations on pages 32 and 33.

**Speeding Up Slow Students:** The slow student, like poor relations, is ever with us. One of the best devices for "speeding up" such a student is to place him by the side of a student who has greater speed, but not so much greater speed that he discourages the slow one. Preferably the student used as a pacemaker should be one who started at the same time as the other.

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The competition mentioned in another paragraph is also useful for this purpose. A slow student can often be stimulated to greater effort by merely putting him in competition with time. Speed sentences and devices of that kind may also be used to advantage.

**Speed of Progress:** As every teacher knows, the progress of the students is almost as varied as the students themselves. Speed of progress, therefore, is an individual problem, and is one that needs the special attention of the teacher. In many schools the problem can be simplified by classification. Proper classification is not always possible, owing to the difficulties of program-making in most schools. The following suggestions may help teachers to overcome the difficulty to some extent:

1. Classification wherever possible and reclassification at frequent intervals.
2. Arranging the program so that the work of instruction can cover possibly two or three lessons of the typewriting Manual.
3. Limiting and intensifying the instruction part of the recitation.
4. Allowing students in their practice periods to progress as rapidly as their individual abilities permit.
5. Careful supervision.
6. Arousing slow and unambitious students to greater effort.
7. Assigning extra periods for students whose progress is slow.

An explanation of the second suggestion seems necessary. The recitation period can be divided into several subdivisions. For example, the teacher may take the first ten minutes of the period for instruction covering general technique, memorization of the keyboard, or whatever it may be. The second subdivision may be devoted to drill in concert, and the third may be devoted to individual practice under the supervision of the teacher. In this way the instruction may cover points on several lessons and the teacher is not held down to a lesson-by-lesson program so far as

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instruction is concerned. This matter is discussed also under the head of "Class Groups—Classification for Instruction."

**Music and Rhythm:** The importance of rhythm in typewriting cannot be overemphasized. Rhythm simply means tapping the keys in even time. Rhythm enables the typist to finger each key properly and to deliver the same amount of energy on each stroke. The result is clean-cut impressions and greater speed.

Rhythm can be taught in several ways. By tapping the desk at regular intervals as the class practices a given exercise; by dictating a list of words in even time or by the use of a Victrola or other phonograph. Much success has been acquired by the use of the Victrola. The stimulating effect of music itself is well recognized. The chief difficulty about this method is to secure the proper records. At the beginning of the work in typewriting the teacher should demonstrate the correct method of acquiring rhythm and explain the reasons for the emphasis that is placed upon it. As most students have a natural conception of "time" as applied to music, there will be little difficulty in driving the idea home. The theme should be constantly iterated, however, until each member of the group has acquired a rhythmic touch.

**Habits to Be Prevented:** There are certain habits that are not mentioned in the textbook which the student is sure to acquire if the teacher's attention is not constantly given to preventing them. Some of the most important of these are: looking at what has been written; looking at the keys while operating; performing any of the mechanical operations without regard to economy of movement, as for example, returning the carriage with both hands; holding the hands too high; moving the elbows in and out from the

body; using the guide keys as pivots; and swinging the hands around in a semicircle in finding certain keys; spacing with the first finger instead of with the thumb; pushing the keys down instead of striking with a staccato touch, and so on.

One of the above-mentioned habits; namely, looking at the fingers while operating, may be condoned on the ground that it enables the student to watch the movement of his fingers. This may be permissible for a brief period each day in the early stages of the work, for the purpose of letting the student see for himself that he is performing the operation correctly. The antidote for bad habits is the substitution of good ones.

**Correcting Papers:** There is a wide difference of opinion among teachers as to the value of extensive and detailed correction of the typewriting produced by the student. To correct the work of even a small group of students is a prodigious task, and the teacher who attempts it soon finds himself so burdened with the quantity that there is little time left for anything else. Unquestionably some papers should be corrected, or at least inspected, by the teacher, and this should be done thoroughly. In the early stages of typewriting the teacher should be more concerned with the *accuracy of the method* than with the accuracy of the copy. Logically, it might seem that if the method were correct, the product would be correct; but this would be disregarding the human element. Proper technique should be stressed from the beginning, and until this has been acquired, and the student is able to execute the movements with a reasonable degree of accuracy, the correction of the papers is an unimportant detail. In determining what papers are to be corrected it would be well to consider three points:

1. The objective.
2. What will the student get out of it?
3. What corrections should be made?

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In considering the first point: The objective in the beginning work is to train the student in the correct manipulation of the machine so far as finger technique is concerned. The copy produced is not always a reflection of accuracy in that respect. If the ideal is a "perfect" copy, the student may produce it *at the expense of technique,* and he has thus *failed in his objective.* Correct technique should produce correct results—but it does not always do so, simply because a perfect nervous system is practically nonexistent or at least so rare as to be negligible. Correct technique will eventually produce better and more accurate results than can be secured in any other way, but the result as revealed in the student's copy may indicate the reverse. As an example: The student of typewriting could unquestionably produce more accurate copy at the beginning by looking at the keyboard while operating; but in a very short time he would be hopelessly left behind by the "touch" writer.

What will the student get out of the corrections? He will generally get out of them just what he puts into them himself. He should, therefore, be trained from the very start *to make his own corrections.* That is what he will have to do in business. He will be expected to turn copy back that needs nothing but the dictator's signature. He should understand from the start that the teacher is a constructive force and not a proof reader. Before papers are presented to the teacher, the student should go over them himself and discover, if possible, any errors he has made; and any corrections that he can make himself should be made by him without assistance. From a lack of knowledge or carelessness some errors are certain to remain undiscovered. The teacher should either put him in the way of securing the information to help him to analyze his difficulties, or in some instances supply him with information that it is clear he does not possess.

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In the Revised Edition of Rational Typewriting, pages 141–143, the method of rating adopted by the United States Civil Service Commission is given. A tabulation of the points deducted for errors should be prepared and posted in the typewriting room, or furnished to students when they enter the class. Students should be required to make corrections on their own papers in accordance with these. It will then be an easy matter for the teacher to inspect the papers and detect which are errors due to a lack of knowledge and which are the result of pure carelessness.

In the correction of transcripts of the student's notes later in the course a different method is necessary. First, all typographical errors should be eliminated by the student himself. Points in punctuation, capitalization, and so on, can be discussed at the dictation period and these matters usually cleared up. The teacher from experience knows the kinds of errors that are generally made. He can spot these as he dictates, and discuss them at the end of the dictation period. It is better to prevent errors than to correct them.

Records: A great deal of ingenuity can be exercised by the teacher in preparing records of the work of the various students which will appeal to the class group. These may be in the form of progress cards on the formal lessons of the textbook used.

Progress Graphs: The use of this device has been found to be of value in stimulating interest in the subject and of bringing to the student's notice the features of his work that need attention. The graphs may include such information as "speed development" as outlined in a previous paragraph, graphs of errors, graphs of progress on lessons, graphs on speed studies, etc. Graphs showing the relation between accuracy and speed disclose many sources of weakness that would not otherwise be located.

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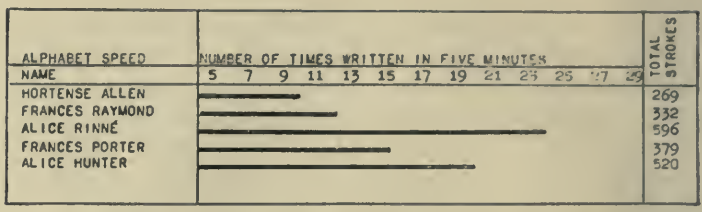


ILLUSTRATION 1. GRAPH SHOWING METHOD OF INDICATING SPEED ON ALPHABET

The graphs on this and the following page are merely suggestive. Illustrations 1, 2, and 3 are very well adapted for the blackboard or bulletin board. Graph 4 is an *individual* record, and may be kept by the student himself under the direction of the teacher.

Many of the forms for the graphs may be prepared in quantity on the mimeograph by students. Suitable cross section paper for preparing many graphs can be purchased at stationers. The graph shown in illustration 2 could be made a permanent one by having the permanent features, such as, title, the figures indicating speeds in words a minute, and the ruling painted on a suitable blackboard in the typewriting room. The names and other changeable data could be written in by hand.

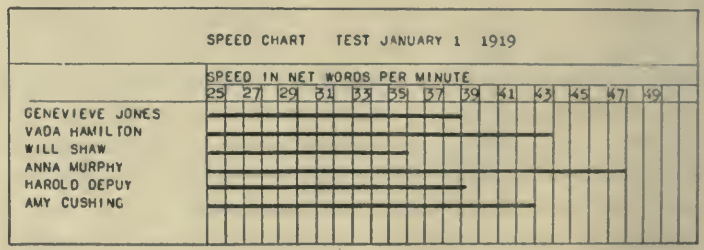
SPEED CHART TEST JANUARY 1 1919
SPEED IN NET WORDS PER MINUTE
25 27 29 31 33 35 37 39 41 43 45 47 49
GENEVIEVE JONES
VADA HAMILTON
WILL SHAW
ANNA MURPHY
HAROLD DEPUY
AMY CUSHING

ILLUSTRATION 2. GRAPH SHOWING INTERESTING SPEED CHART

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| ALPHABETIC SENTENCE SPEED CHART | | | | TOTAL WORDS | |
|---|---|---|---|---|---|
| NAME | SENTENCE NUMBER | TIMES WRITTEN | ERRORS | | TIME |
| JOHN WILLIAMS | 2 | 10 | 2 | 100 | 5 MINUTES |
| TIMOTHY FORSYTHE | 2 | 11 | 0 | 110 | 5 MINUTES |
| EDUARDO DE BOULANGER | 2 | 9 | 0 | 90 | 5 MINUTES |

ILLUSTRATION 3. ALPHABETIC SENTENCE SPEED CHART

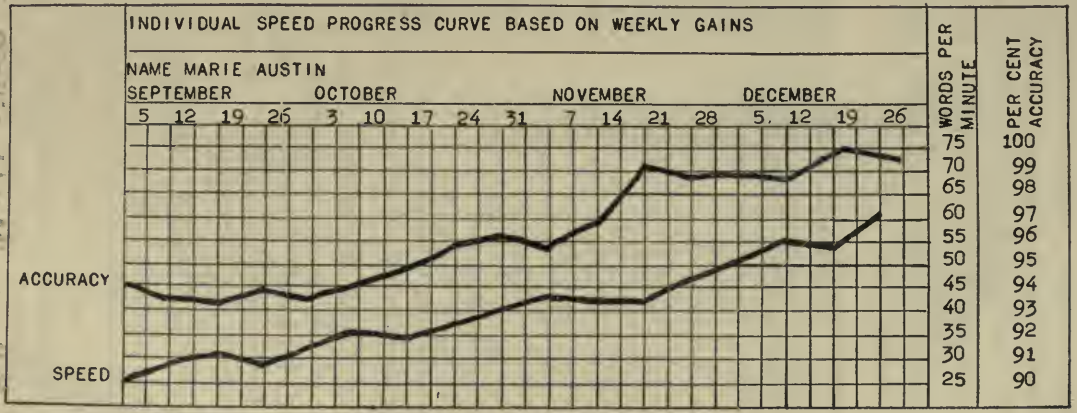
INDIVIDUAL SPEED PROGRESS CURVE BASED ON WEEKLY GAINS
NAME MARIE AUSTIN
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
5 12 19 26 3 10 17 24 31 7 14 21 28 5 12 19 26
ACCURACY
SPEED
WORDS PER MINUTE
75 70 65 60 55 50 45 40 35 30 25
PER CENT ACCURACY
100 99 98 97 96 95 94 93 92 91 90

ILLUSTRATION 4. GRAPH SHOWING GAINS IN SPEED AND ACCURACY

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**Record Cards:** Record Cards for the Revised Edition, Medal of Honor Edition and Single Keyboard Edition (Underwood and Remington), are furnished to teachers by the publishers at a nominal price. (See illustrations.)

**Method of Handling Record Cards:** The cards are 3 x 5 inches in size and fit the ordinary card index drawer.

RECORD CARD for use with RATIONAL TYPEWRITING

NAME ENTERED NUMBER

| Lesson | Comp | Grade | Lesson | Comp | Grade | Lesson | Comp. | Grade | Lesson | Comp | Grade | Lesson | Comp | Grade | Lesson | Comp. | Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 14 | | | 27 | | | 40 | | | 53 | | | 66 | | |
| 2 | | | 15 | | | 28 | | | 41 | | | 54 | | | 67 | | |
| 3 | | | 16 | | | 29 | | | 42 | | | 55 | | | 68 | | |
| 4 | | | 17 | | | 30 | | | 43 | | | 56 | | | 69 | | |
| 5 | | | 18 | | | 31 | | | 44 | | | 57 | | | 70 | | |
| 6 | | | 19 | | | 32 | | | 45 | | | 58 | | | 71 | | |
| 7 | | | 20 | | | 33 | | | 46 | | | 59 | | | 72 | | |
| 8 | | | 21 | | | 34 | | | 47 | | | 60 | | | | | |
| 9 | | | 22 | | | 35 | | | 48 | | | 61 | | | Final Grade | | |
| 10 | | | 23 | | | 36 | | | 49 | | | 62 | | | | | |
| 11 | | | 24 | | | 37 | | | 50 | | | 63 | | | Average Time | | |
| 12 | | | 25 | | | 38 | | | 51 | | | 64 | | | | | |
| 13 | | | 26 | | | 39 | | | 52 | | | 65 | | | | | |

ILLUSTRATION OF REVISED EDITION RECORD CARD—FACE

A card should be provided for each student, and as the work of the lesson or a section of the lesson is completed, it should be entered on the card so that by referring to the card the teacher can ascertain the progress of the student.

**Revised and Medal of Honor Editions:** On the face of the card place the student's name and file number and the date he entered the class. Space is also provided for entering the date when each lesson is completed and the grade. The date should be entered in figures; as, 3/15. With the date of entrance and date of completion of the first lesson the

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teacher can quickly ascertain how much time the student consumed in completing the first lesson. Thereafter the time which lapses between the dates of completing one lesson and the following lesson shows the time required for completing each lesson. On the back of the cards, space is provided for the grades and dates of completing "Supplementary Exercises," "Words of High Frequency" and

| SUPPLEMENTARY EXS. | | | WORDS OF HIGH FREQUENCY | | | | | | SPEED STUDIES (Enter date and speed in space provided, thus 9/10-50) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ex. | Grade | Date | Ex. | Grade | Date | Ex. | Grade | Date | Les. Ex. | | Les. Ex. | | Les. Ex. | | Les. Ex. | | Special | |
| 1 | | | 1 | | | 11 | | | 37-1 | | 38-3 | | 39-5 | | 41-4 | | | |
| 2 | | | 2 | | | 12 | | | 2 | | 4 | | 6 | | 42-1 | | | |
| 3 | | | 3 | | | 13 | | | 3 | | 5 | | 40-1 | | 2 | | | |
| 4 | | | 4 | | | 14 | | | 4 | | 6 | | 9 | | 3 | | | |
| 5 | | | 5 | | | 15 | | | 5 | | 7 | | 8 | | 43-1 | | | |
| BUDGETS Check as Completed | | | 6 | | | 16 | | | 6 | | 8 | | 4 | | 2 | | | |
| I | V | | 7 | | | 17 | | | 7 | | 39-1 | | 5 | | 3 | | | |
| II | VI | | 8 | | | 18 | | | 8 | | 2 | | 41-1 | | 44-1 | | | |
| III | VII | | 9 | | | | | | 38-1 | | 3 | | 2 | | 2 | | | |
| IV | VIII | | 10 | | | | | | 2 | | 4 | | 3 | | 3 | | | |
| OFFICE TRAINING SUBJECTS (Check each item as completed) | | | | | | | | | | | | | | | 45-1 | | | |
| | | | | | | | | | | | | | | | 2 | | | |
| Features of Machine | | | Postal Cards | | | Business Correspondence | | | Billing | | | | | | | | | |
| Telegrams | | | Envelopes | | | | | | Tabulation | | | | | | | | | |
| Cablegrams | | | Manuscripts | | | Civil Service-Examination | | | Law Papers | | | | | | | | | |
| Rough Draft | | | Arrangement | | | | | | Business Papers | | | | | | | | | |

ILLUSTRATION OF REVISED EDITION RECORD CARD—BACK

"Budgets." Space is also provided for entering the speeds and dates on the various "Speed Studies."

The Office Training subjects, such as "Features of the Machine," and "Telegrams," may simply be checked as they are completed. In this way the teacher can be sure that every student has received the necessary instruction and practice on these.

**Single Keyboard Edition:** Space is provided on the card for "Starting," "Finishing" and "Grading" on each lesson. On the back, records of "Fingering Exercises," in the back of the book (pages 101–104), Supplementary Exercises,

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**RATIONAL TYPEWRITING - MEDAL OF HONOR EDITION**

NAME _____ DATE _____ NO. _____

| LESSON | COMPLETED | GRADE | LESSON | COMPLETED | GRADE | LESSON | COMPLETED | GRADE |
|---|---|---|---|---|---|---|---|---|
| 1 | | | 13 | | | 25 | | |
| 2 | | | 14 | | | 26 | | |
| 3 | | | 15 | | | 27 | | |
| 4 | | | 16 | | | 28 | | |
| 5 | | | 17 | | | 29 | | |
| 6 | | | 18 | | | 30 | | |
| 7 | | | 19 | | | 31 | | |
| 8 | | | 20 | | | 32 | | |
| 9 | | | 21 | | | 33 | | |
| 10 | | | 22 | | | 34 | | |
| 11 | | | 23 | | | 35 | | |
| 12 | | | 24 | | | 36 | | |

| BUDGETS | | |
|---|---|---|
| NUMBER | COMPLETED | GRADE |
| I | | |
| II | | |
| III | | |
| IV | | |
| V | | |
| SUPPLEMENTARY EXERCISES | | |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |

ILLUSTRATION OF MEDAL OF HONOR RECORD CARD—FACE

| SPEED RECORD ON SPEED STUDIES | | | | | | | |
|---|---|---|---|---|---|---|---|
| LES. EX. | AVG. SPEED | LES. EX. | AVG. SPEED | LES. EX. | AVG. SPEED | LES. EX. | AVG. SPEED |
| 13-1 | | 14-3 | | 15-5 | | 17-4 | |
| 2 | | 4 | | 6 | | Spl. 1 | |
| 3 | | 5 | | 16-1 | | 2 | |
| 4 | | 6 | | 2 | | 3 | |
| 5 | | 7 | | 3 | | 4 | |
| 6 | | 8 | | 4 | | 5 | |
| 7 | | 15-1 | | 5 | | 6 | |
| 8 | | 2 | | 17-1 | | 7 | |
| 14-1 | | 3 | | 2 | | 8 | |
| 2 | | 4 | | 3 | | 9 | |
| SPECIAL ARTICLES | | | | | | | Grade |
| Numerals (2) | | | | | | | |
| Spacing After Punctuation Marks (1) | | | | | | | |
| Things You Ought to Know (3) | | | | | | | |

| WORDS OF HIGH FREQ | |
|---|---|
| LES. | COMP |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |

| OFFICE TRAINING Check each feature as finished | | |
|---|---|---|
| | Page 41 | |
| Business Correspondence | | |
| Folding Letters | 42 | |
| Postal Cards | 42 | |
| Carbon Copies | 43 | |
| Finished Letter | 63 | |
| Telegraphic Messages | 64 | |
| Rough Draft (4 Ex.) | 66 | |
| Directing Envelopes | 70 | |
| Tabulators | 42 | |
| Tabulation and Billing | 73 | |
| Machine Rolling | 75 | |
| Manuscripts and Cover | 85 | |
| Business Papers | 86 | |
| Law Papers | 86 | |
| Additional Characters | 72 | |

ILLUSTRATION OF MEDAL OF HONOR RECORD CARD—BACK

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RATIONAL TYPEWRITING—STUDENT'S RECORD

NAME: NUMBER: ENTERED:

| LESSON | START | FINISH | GRADE | LESSON | START | FINISH | GRADE | LESSON | START | FINISH | GRADE | LESSON | START | FINISH | GRADE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 10 | | | | 19 | | | | 28 | | | |
| 2 | | | | 11 | | | | 20 | | | | 29 | | | |
| 3 | | | | 12 | | | | 21 | | | | 30 | | | |
| 4 | | | | 13 | | | | 22 | | | | 31 | | | |
| 5 | | | | 14 | | | | 23 | | | | 32 | | | |
| 6 | | | | 15 | | | | 24 | | | | 33 | | | |
| 7 | | | | 16 | | | | 25 | | | | FINAL GRADE: | | | |
| 8 | | | | 17 | | | | 26 | | | | AVERAGE TIME | | | |
| 9 | | | | 18 | | | | 27 | | | | | | | (over) |

ILLUSTRATION OF SINGLE KEYBOARD EDITION RECORD CARD—FACE

| FINGERING EXERCISES | | | SUPPLEMENTARY EXS. | | | SPECIAL Note: Check each item as completed | | | |
|---|---|---|---|---|---|---|---|---|---|
| EX. | DATE | GRAD | EX. | DATE | GRAD | | | | |
| 1 | | | 1 | | | Capitals | | Manifolding (Carbon) | |
| 2 | | | 2 | | | Characters not on Keyboard | | Mineograph | |
| 3 | | | 3 | | | Numerals | | Folding Letters | |
| 4 | | | 4 | | | Spacing after Punctuation | | Directing Envelopes | |
| 5 | | | 5 | | | "Things You Ought to Know" | | Finished Letter | |
| 6 | | | 6 | | | Business Cor.; Artistic Arrangement | | Telegrams | |
| 7 | | | | | | Suggestions for the Typist | | Centering | |
| 8 | | | | | | Enclosures | | Covering & Indorsing | |
| 9 | | | | | | Corrections and Erasures | | Tabulator | |
| 10 | | | | | | Postal Cards | | Ruling | |

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ILLUSTRATION OF SINGLE KEYBOARD EDITION RECORD CARD—BACK

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accompanying the lessons may be introduced. Important features of the course are listed under the subject of "Special."

The object of this record is simply to show that the work under each of these has been satisfactorily completed. The record has an interest as well as practical value.

**Constructive Work:** In any well planned course of instruction provision is made for constructive work—working up tabulations or other data from material furnished. This may be supplemented by original problems, the data for which the student can collect himself, and assemble, at first, with the aid of the teacher. The collecting and arranging of data in this way is a feature that will arouse the student to do his best. It prepares him for practical work in the office because, as the teacher knows, the typist is constantly encountering new problems, and his ability to solve these will depend entirely upon his training in meeting conditions in the schoolroom. In preparing this work, the student should be left as far as possible to his own devices so as to cultivate self-reliance and judgment.

**Stereopticon:** The use of the stereopticon in explaining various features of the machine, the various forms of business letters and other material is almost indispensable in teaching the subject of typewriting. Aside from its value in saving the time of the teacher and of the student himself it has an interest value that is important. Slides showing the position at the machine, the position of the hands, arms, and body, the method of striking the keys, the divisions of the keyboard, etc.—all make a very vivid impression if thrown on the screen. They are even to be preferred to charts in the text, for they offer the teacher the opportunity of pointing out the various features under discussion with definiteness.

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**Analysis of Rational Theory of Presentation:** The early lessons, except the first, are divided into three parts. The preliminary exercise is designed to familiarize the student with the letters in the finger division under consideration, to assist him in memorizing the location of each letter, and to give practice in making the reaches. This is a very important feature of the work of learning and should not be neglected.

The first exercise is designed to give the student practice in making the reaches and to cultivate rhythm by repetition on words that have been selected, after careful study, to secure the greatest amount of practice with the minimum of effort and time. These exercises are intensive in a high degree and accomplish the ends not so much by *quantity* of practice as by *quality*.

The second exercise is designed to give the student practice in concentration—and concentration is one of the foundation stones upon which accurate and swift typewriting is based. In this exercise the student encounters a succession of new words; they hold his attention and he gets the necessary amount of practice in dealing with new combinations of characters. The new words besides holding his attention increase his command of the keyboard by giving him a variety of practice in making the reaches.

The third exercise is designed to give the student facility in execution on connected matter, to accelerate finger action, and to create the habit of continuous operation.

Thus it will be seen that each fingering lesson contains three steps. The first is designed to assist the student in getting a mental picture of the keyboard and sufficient repetition practice to secure correct rhythm, to aid the habit-forming process, and to insure a more complete command of the keyboard. The second furnishes practice on purely constructive work of writing "new matter," which is neces-

sary to increase the ability to handle new problems and to enforce concentration. The third step is designed to secure speed in execution.

**Presentation of Lessons:** The individual presentation of lessons naturally will be governed largely by the methods of teachers. Rational Typewriting lends itself readily to a variety of methods of handling. Its flexibility is one of its strong points. The teacher is advised to study the suggestions to the teacher given on page one of the Revised Edition, and also the suggestions to students on page two. A very complete statement of the procedure in teaching the first keyboard lesson is given on pages six and seven. While this latter instruction is directed primarily to the student, it will be of very great value to the teacher in suggesting a method of beginning.

**The First Lesson:** The method of conducting the first lesson is covered quite completely in the outline for the Revised Edition and will make clear the general plan of instruction. The student naturally begins his work with a great deal of initial enthusiasm. It should be the aim of the teacher to preserve this enthusiasm and this he can do by making the first lesson interesting and to make sure that nothing is undertaken that cannot be successfully accomplished in the first lesson. The student must leave the typewriting room with the feeling that he had made a decided step forward in his work.

. The lesson should be planned with the utmost care. It will be necessary to make a program outlining just what he hopes to accomplish in the period, and to be cautious in not being too ambitious.

The lesson should start with a general explanation of the aims of the typewriting course. This should be followed by an adequate description of the machine and its mechanical functions with plenty of illustration. If the teacher is pro-

vided with suitable charts showing the different parts of the machine, or a stereopticon with slides to show these parts, the work can be accomplished much more easily and effectively. Care must be taken not to include more than the student can absorb. It will be well to remember that the student is primarily interested in "working" the machine. Consequently, all instruction regarding the mechanical operation of the necessary parts should be reduced to the minimum. So far as mechanical operation is concerned, the first lesson should include instruction only on inserting and removing paper, the space bar, line spacing, returning the carriage, releasing the carriage, and inspecting the writing. This naturally should precede any work on operating the keyboard, and the work should be carried on sufficiently to give the student considerable skill in performing the operations. An outline of the work on the keyboard should be then taken up by the teacher—explanation of the divisions of the keyboard, the importance of invariable fingering, touch, method of striking keys, position at machine, and so on. As much time as possible of the period should be devoted to actually operating the machine. But the periods of operation should be split up in many sections, giving the student a little at a time.

**Methods of Handling Succeeding Lessons:** The best methods of handling the succeeding lessons are explained in the outlines for the various editions. These are, of course, susceptible to variation according to the preferences of the teacher. The teacher should make a careful study of the outlines, however, before planning the work of any lesson and do whatever adaptation work is necessary beforehand. He should leave nothing to the spur of the moment.

The author will be glad to give any possible assistance in handling special problems.

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## THE TECHNIQUE OF TYPEWRITING

**Mechanics of the Machine:** This question has already been discussed under the head of "The Typewriter from the Mechanical Viewpoint." As a teaching device it will be of value in this respect—students at times tire of the purely manipulative part of typewriting. The introduction of studies about the mechanism of the machine will be welcomed as a pleasing and valuable diversion. A study of the complete instruction books issued by the makers of the various machines, diagrams on the board, or a personal demonstration of the functions of the various parts of the machine, will prove a valuable aid in teaching.

**Methods of Approach:** The accompanying illustrations will make clear the proper method of approach in locating or finding the keys in the early stages of learning. As has

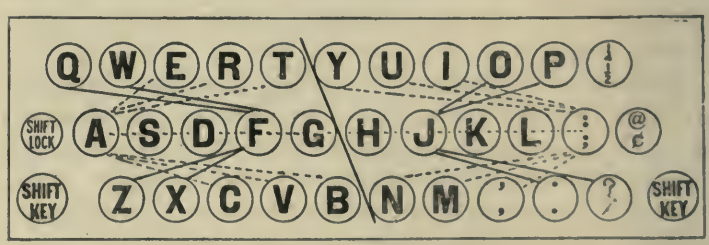


ILLUSTRATION 1

The dotted lines show the method of approach in finding keys in the first lesson. The same method is to be pursued in the second, but in the third and fourth lessons the guide keys "F" and "J" should be used, as shown by the solid lines. It will be noted that the student proceeds always from the known position to the unknown by accurate means.

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been explained, this method gives way later to a more advanced type of execution.

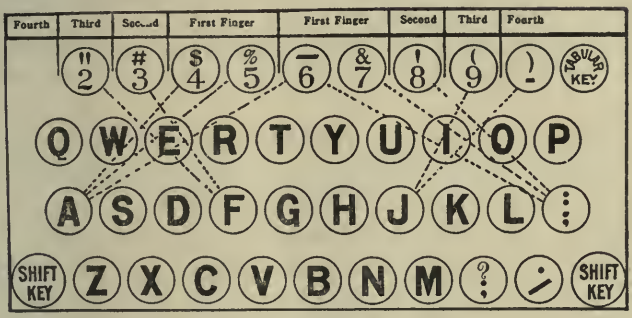


ILLUSTRATION 2

The dotted lines show the method of approach in finding the figure keys. Attention is called to the use of the guide keys "F" and "J." A similar approach is made from "F" and "J" in finding the keys "Q" and "W," "Z" and "X," and the corresponding keys in the right-hand division. See "Learning the Keyboard," page 48.

**Position at the Machine:** The position at the machine has an important influence on efficient operation. It can best be illustrated by the teacher. There has been much discussion among both teachers and expert writers as to the best position; but a study of the matter, and a careful observation of the positions assumed by various expert operators, shows that there is a wide diversity of practice in this respect, due to individual preference in some instances and to bad early habits in others. Faulty position is due in most cases to the failure of teachers to check students up on these matters early in their typewriting experience.

The majority of the best typists agree on the following points:

Considered as a general proposition the typist should sit in a position that gives him the greatest amount of comfort,

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taking into consideration the structure of the machine itself and the position in which he can do the greatest amount of work with the least effort, and, consequently, with the smallest amount of fatigue.

He should sit in a natural upright position, directly in front of the machine with his feet in front of him on the floor.

The height of the seat should be such that the elbows are on a level with the table; the forearms parallel with the slant of the keyboard; and the upper arms hanging naturally at the side. Rigidity of body, arms, and hands is to be avoided. The back should be straight from the hips up, and there should be no slouching down over the machine. Any bending of the body, backward or forward, should be from the hips.

The typist should acquire the habit of sitting as nearly as possible in the same position *always*. This does not mean that his position should be stiff and unyielding. On the contrary there must be a complete sense of freedom. But it can readily be seen that as soon as the position of the typist changes the reaches to the keyboard necessarily change.

Initially the hands should be placed over the keyboard with the fingers resting lightly on the letter "a" and the semicolon. The wrists should be lowered a trifle, but they should not touch the frame of the machine. The hands should be kept quite close together and the elbows should never be stuck out.

During the first few weeks of the instruction the teacher should maintain daily drills in position, until the correct position has become a habit. During the practice periods, the teacher should move around the room and watch carefully for bad position, and, when necessary, illustrate the correct position to students that are not maintaining it.

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Chairs should be provided that have adjustable backs, as a back rest is necessary to provide against undue fatigue. It is well to remember that a student who is physically tired cannot do himself justice, and every effort should be made to make his working conditions as comfortable as possible.

**The Guide Keys—"Home Position":** The work in fingering begins in the middle of the keyboard for the obvious reason that these fingers are more easily controlled than any of the others, and also because the use of the first or index fingers does not interfere with the proper use of the guide keys. In the beginning of the work in fingering, both the technique of operation and hand position are of the utmost importance. The location of each key in the initial stage of learning is determined or measured from the guide keys "a" and ";." As the student becomes more accustomed to the reaches, he depends less and less upon the guide keys, or the "home row"; but these continue to play an important part in the work of keeping the hands in proper position for effective work, even in the most expert stages of typing. Another important function of the guide keys is in keeping the fingers close to the keyboard. The guide keys should be used to help the student locate the home row.

The normal position of the fingers for the left hand, for example, is to have the little finger on "a," the third finger on "s," the second finger on "d" and the first finger on "f." The right hand should be placed in like position by starting with the little finger on ";", and the other fingers following along in order, the first resting on "j." The fingers should be trained to fall back into this position quickly after striking a letter.

**Getting Back to Home Position:** The normal position of the hands and fingers has been discussed under another

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head. In all practice work, the student should be trained to let his fingers fall back into this position immediately after striking a key, for it will enable him to locate the following key much more quickly and accurately. This is extremely important in word practice, for the reason that students will locate the sequence of letters in a word and *let the fingers remain on the keys involved* as far as possible, and consequently lose the practice of finding the keys and acquiring the sense of location.

Getting back to position is an important part of the technique of operation, and the teacher should provide ample practice in this. Individual work with each student is essential to secure the best and most lasting results. Frequent tests of the student's ability in this direction are necessary to insure his progress. As an illustration of how this may be carried on: With the hands in the proper position, ask the student to pick out different letters as you dictate them. Watch his method of finding and returning. The approach of the key should be along the most direct line; there should be no waste movement. This, of course, should be done with a great deal of deliberation at first, until the student has got the "feel" of letter location.

One of the most important problems in getting back to "home" position is involved at the time of spacing and returning the carriage for a new line, because it necessitates taking one hand away from the keyboard. A study should be made of the movements necessary in returning the carriage and returning the hand to position, and students drilled particularly in accurately replacing the hand.

**Touch:** Touch, in this present connection, will be considered merely as one activity and apart from the process involved in finding the keys, which will be discussed elsewhere. Touch primarily means striking the key with a sufficient amount of force to drive it home, timing it correctly,

and releasing the key *promptly*. The musical term, "staccato," best describes it. As practically the same amount of force is required on each key, when the "feel" of the correct touch is once established, it becomes automatic very quickly. The principal points to be considered are:

(1) Hitting the key squarely in the center;
(2) Delivering just enough power, and no more, to make a proper contact of key with ribbon and platen;
(3) Getting the finger off the key quickly.

Hitting the key squarely in the center is a matter of judgment that can be acquired only by practice. Success in hitting it properly will depend largely upon the strength of the tactual image. If the key is struck on the edge, the finger is likely to slip off to one side, resulting in an indistinct impression.

The amount of power to be delivered is also a matter of practice. The teacher should illustrate the effect of variations in touch to show the students the importance of striking with an even blow. The amount of power delivered also has an important bearing on speed and on rhythm. Constant use should be made by the teacher of the student's desire to acquire speed by showing him how all features of typewriting technique influence it. A light, even, rhythmic touch conserves energy, increases production, and gives better finger control.

The most important factor in touch is the *speed with which the key can be released.* It is even of greater importance than speed in striking the key. If the teacher explains and illustrates how one key must necessarily get back to its proper position before the next is struck, the importance of finger release will be quickly appreciated by the student. The key should never be held until the reaction of the mechanism is felt. The proper stroke is a light tap, not a "push."

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The slight difference in length of strokes on different machines should be taken into consideration in teaching touch.

In the first few lessons, drills can be given in touch in this way: Have the student place his hands on the home row of keys and practice striking the letters "asdfghjkl" in rotation. These movements should be executed in even time, care being exercised to give the same power to each stroke. The teacher should watch carefully to see that the fingers are being lifted promptly, but not any higher than is necessary to let the key resume its normal position. The fingers should remain as close to the keys as possible. One advantage of this is that it will tend naturally to give students a light touch, as in this position it will be difficult to strike with a heavy blow. Heavy touch is usually the result of lifting the fingers too high from the keys, or from attempting "speed" before resiliency of finger action has become automatic.

**Learning the Keyboard:** The keyboard can be taught more effectively by finger sections than in any other way. Many teachers advocate learning the entire keyboard before any writing at all is done, but this tends to discourage the student at the very start. The average young person wants action—not theory.

There is a decided advantage in teaching the keyboard in finger sections because the student learns easily to associate certain letters with certain fingers, and this simplifies the matter of correct fingering. The charts in Rational Typewriting are designed on this principle.

The method of approach in learning any section of the keyboard is to start from the guide keys on the home row. In starting with the home row, consider first the positions of the guide keys, "a" and the semicolon. After the learner has fixated these, has had an opportunity to place his hands in the proper position, and has accustomed

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himself somewhat to the "feel" (motor tactual image) of this position, practice in taking the hands off the keyboard and returning them should be required until proficiency is acquired. The work may be begun by having him feel along the home row, right-hand division, until he comes to the third key from the guide key which is the letter "j." The teacher can utilize a wall chart to assist the student in this. As soon as the student has found this key let him strike it a few times, mentally measuring the distance from the guide key each time, and at the same time associating the location of the key with the letter. Let the student take his hands from the keyboard and replace them, finding the desired key. The method should then be developed by having the student find "h." When the location of the four keys on the home row has been well fixated and sufficient practice has been obtained in finding the key in different letter combinations, the next step is to find the letter "u" from "j," then "y" from "h." The operation then can be transferred from the one side of the keyboard to the other, and the whole central section developed in this way.

The memorizing of the keyboard can best be accomplished by associating it with the "reach" in actual writing. This gives an activity to the work that relieves it of monotony. This work should be supplemented by chart work. The teacher can point to the different positions on the chart, asking the student to name the key. It would be well to instruct him to try at the same time to go through the mental movements of striking the key. As a test of the student's ability to recall the exact location of each key, a diagram of the various divisions of the keyboard may be required, but this exercise is of little value otherwise.

The method outlined above can be used in developing a knowledge of the other finger divisions.

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The work on the memorizing of the keyboard should not be discontinued until the teacher is positive that every student knows the exact location of each key, the finger with which it is struck, and has acquired the ability to find the key instantly. It cannot be said that the keyboard has been memorized until the mere sight of a letter starts the proper letter-making movements. When the first four lessons of Rational Typewriting have been completed, occasional drills on the keyboard should be used to keep the impression of the entire keyboard fresh in mind.

**Letter-making, the Five Steps:** Dr. William Frederick Book, in "The Psychology of Skill with Special Reference to Its Acquisition in Typewriting," gives the five steps in letter-making as follows:

1. Getting the copy (that is, getting in mind the letter to be written);
2. Spelling the letter, or fixating it in the copy;
3. Mentally locating the corresponding key;
4. Movement required for reaching the key with the proper finger;
5. Initiation of the letter-making movement.

These steps must be gone through in the striking of every key, and particularly in the early stages. As skill is acquired by the student, these steps become automatic—are practically merged into one act—but they are always present. In the advanced stages of typing, the letter-making steps are extended to sentences and even, finally, to phrasing as it is known in shorthand writing. In the expert stage the mere seeing of a word or group of words sets up the movements necessary to execute them.

It can readily be seen that much attention should be given to the technique of the five steps. Training in the early stages to develop precision in the execution of them should be carried on extensively.

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There are many influences bearing on the problem. Many students are unable to spell quickly and correctly even when the word is before their eyes—owing, it may be, to previously conceived ideas of the spelling of the word, or a vague notion of what the word really is. The ability to see clearly and quickly is also often absent or poorly developed.

Mentally locating the key successfully depends upon a thorough knowledge of the keyboard—its complete and positive memorization. The movement required for reaching the key should be analyzed and mastered. This feature is far more extensive in scope than is realized by most teachers. When it is understood that letters occur in thousands of combinations, each requiring a different movement and the selection of the correct finger, the complexity of the problem will be appreciated. The motor impulse necessary to the proper initiation of the correct letter-making movement depends very largely upon the impression the copy has made upon the student's mind. Drill in concentration upon the details of execution should form a considerable part of the training.

**The "Warming-up" Process:** It is psychologically impossible for the student to begin where he left off in his previous period's practice. A certain amount of warming up is essential. The teacher can use the first few minutes of his recitation to marked advantage by utilizing them in reviewing to some extent the work of the previous recitation, in the repetition work of writing familiar words, or the alphabet, or sentences, or phrases, or whatever may have formed a definite part of the previous period's activities. The student thus starts with something with which he is more or less familiar, and his success in accomplishing it gives him a feeling of confidence in attacking new problems.

**The Formation of Habits:** It is earnestly recommended that teachers make a special study of this subject from the works of both James and Judd, particularly the chapters relating to motor habits. The subject is also treated in a valuable and interesting way in "How to Teach" by George Drayton Strayer and Naomi Norsworthy (the Macmillan Company).

Typewriting is merely the result of acquiring certain habits that soon become automatic. Bad habits are just as likely to be acquired as good habits. The teacher must be constantly on the alert to detect incorrect methods of operation before they have become habits. It is axiomatic that the typist should never be allowed to do a thing in the wrong way if it is humanly possible to prevent it. Consequently, all operations of the machine should be clearly analyzed by the teacher and a method worked out for illustrating these to the student, so that his first trials will be in accordance with correct technique and therefore be as successful as possible. It is true that certain habits—only temporary in nature—are learned at the beginning which later give way to higher-order habits through a short-circuiting process. As an illustration: The student first learns to use the guide keys in finding the letters. Possibly it may be necessary for him actually to feel his way to the desired key in certain instances. This habit gives way very quickly to finding the key directly from the guide key or home position; this in turn gives way, as the student acquires confidence and a more perfect knowledge of the location of the letters, to the higher-order habits of finding one key directly from the preceding key, and so on. Thus each habit becomes a step in the progress. If the student were allowed to use his eyes in finding the keys, these preliminary steps would, in a measure, become unnecessary; but in the end he would have to depend upon his sight for all writing. With

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the "touch" method he proceeds gradually from the known to the unknown. Personal supervision of the teacher is essential in all the early stages of typing. The steps in learning the technique of keyboard operation briefly are:

First, learning the theory of the correct method;
Second, fixating the letter location;
Third, initiating the movement;
Fourth, practicing the movement until automatism is acquired.

**Deliberation—Certainty:** In the early stages of the work and until the student has acquired confidence in his ability quickly to locate keys, deliberation in all steps is essential. Accurate control of nerves and hand demands this. Consequently the student should not be hurried; he should be given time to think out the position of the letters he is to strike, but "feeling" around more or less aimlessly for the letter should be discouraged. Deliberation and certainty are necessary to prevent the acquirement of incorrect habits. If too much speed is attempted, the student will lose control of his fingers and they will stagger around over the keyboard discharging nervous energy without accomplishing anything.

**Accelerating Finger Action:** Exercises for developing quickness in fingers, if worked into the form of competition, can be made very effective. Such exercises generally are composed of combinations of letters which tend to give the student power in handling the commonly recurring frequencies of letters. This can be utilized in connection with the speed drills mentioned in "Teaching Methods."

**Practice away from the Machine:** This is a form of exercise which may be made to yield excellent results and it also stimulates an interest in the work from a different an-

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gle. It can only be used, however, after the student has visualized the keyboard fairly well. It consists in simply locating mentally the positions of keys while reading and going through the mental process of striking them. Students generally reach a stage when this kind of practice comes involuntarily. They find themselves spelling out on an imaginary keyboard the advertising signs they see in cars, the signs on the street, the headlines of newspapers, etc.

Harold Bauer, the celebrated pianist, in speaking of the grind of practice which many pupils think essential to the development of piano technique, said in an interview:

I have found in my own experience that it is absolutely unnecessary. I was a violinist first, as you know, and the career of a pianist was, in a way, forced upon me after I was grown up. But I have never regretted the time spent with the violin—it taught me how to practice.

When I realized that I was to become a pianist, I held a consultation with myself. I had practically no piano technique, and I realized that I had not time to go through years of merely mechanical work, so the question was, How to achieve the best results in a limited time? And in working out the solution of the problem I found that properly directed mental work away from the instrument reduced the amount of necessary mechanical practicing to a minimum.

I made out my programs and picked out of every composition the passages that offered me the greatest difficulties. Upon analyzing these, I found that in every such passage there was one special sticking point, and that when once the right position of the hand for it was decided upon, all the rest of the passage was simplified.

This theory I have applied in my teaching with excellent results. Analyze the passage that seems to bristle with difficulties, pick out the most difficult spot—there is always one particularly refractory measure on which everything else hinges; master it, and the position of the hand then practically determines the position of the hand for the whole passage. I encourage my pupils to do as much work as possible away from the instrument, though of course that depends largely upon the student's capacity for mental concentration.—*Musician*, September, 1908.

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Gymnastics: Finger gymnastics can be used with great advantage because of their interest value. They undoubtedly have some value in helping students to make their hands and fingers more flexible. They will appeal to the student because he will be able to see at once that such exercises may have a bearing on the question of effective keyboard manipulation. The following exercises to be practiced away from the machine are especially beneficial:

1. Hold the hands as if over the keyboard; completely relax from the wrists, and exercise by moving the hands up and down, or around. Aim: To give the hands flexibility and relieve muscular stiffness. Relaxation is very important.

2. Place the hands on a table or other flat surface, move the hands up and down with the wrists stationary.

3. Place the wrists on a table, with the fingers curved toward the surface so that all fingers touch the table as in writing on the machine, move the fingers up and down, alternately 1, 3, 2, 4, and in other combinations, as in striking the keys. Keep all fingers on the table that are not performing the exercise. Aim: To give independent finger control.

4. Place the hands flat on the table with the fingers close together. Spread the fingers as far apart as possible. Return to first position. Repeat the exercise with the hands off the table. Repeat one finger at a time. Aim: Finger control.

5. With the hands open, palms upward and fingers extended, draw the fingers one at a time to the palm of the hand. Repeat in different orders. Repeat with palms turned downward. Aim: Finger control.

6. With the left hand open, grasp the fingers of the left hand with the right hand, the thumb extended on the back of the knuckles, bend the fingers of the left hand back as

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far as they will go. Resist the effort to bend the left hand back. Repeat. Repeat the exercise for the right hand. Aim: Strengthening the fingers.

7. With the forearms extended as in writing, move the hands up and down, using the wrists as a hinge. Aim: To strengthen the wrists.

8. With the hands placed as indicated in No. 3, raise the third finger up and down as in tapping a key. Aim: To cultivate control of third finger.

9. Practice No. 8 for the fourth fingers.

The following exercises are to be practiced upon the typewriter:

1. With hands in proper position for writing, practice the following combinations: asdfg, hjkl;, gfdsa, ;lkjh, asdfg, hjkl;, gfdsa, ;lkjh, asdfg, hjkl;, gfdsa, ;lkjh, asdfg, hjkl;, gfdsa, ;lkjh, asdfg, hjkl;, gfdsa, ;lkjh, asdfg, hjkl;, gfdsa, ;lkjh.

2. Practice the same exercise on each bank of keys, returning to home position after each line. Aim: Warming up.

3. With hands in writing position, practice moving each finger in turn from home row to upper and lower banks of keys, using various combinations; as, de, ed, ec, ce, in, no, mn, fr, se, rs, ex, fe, ef, ol, lo, im, mi, etc. Aim: To develop ability to reach various banks quickly and accurately.

4. Practice moving fingers from given letters to figures. Combine upper letter bank with figure; as, w2, e3, r4, t5, etc. Aim: Location.

5. Practice making figure reaches from home position; also from lower bank; as, 4x, e3, etc. Aim: Same as four.

It should be clearly understood that calisthenics or finger gymnastics can never take the place of actual writing. Their interest value is perhaps of more importance than any intrinsic value that may attach to them. The expert typists are practically in agreement that *the best practice is*

*the practice that is done on the machine.* The exercises suggested in the foregoing are useful only as auxiliaries to work on the machine. They have the advantage of being susceptible to practice away from the machine. Any use of the fingers that simulates the work on the machine is useful and has an influence on the student's progress and ultimate success.

**The Remington Self-starter:** The Self-starter should be thoroughly studied and the use of it established as early in the practice as possible. It is a valuable time-saver in correspondence. The Remington Typewriter Company has established certain standard settings for the Self-starter illustrated on page 43 of both the Revised and Medal of Honor Editions of Rational Typewriting. For all practical purposes these settings can be used in the majority of cases. The Self-starter rack, however, has two scales, thus providing for two different settings. This gives the typist greater scope in the arrangement of letters of varying length. A little study on the part of the teacher devoted to the standardization of forms will enable him to work out settings that hardly ever need be changed.

In the business correspondence material submitted in Rational Typewriting, both editions, there is great variety in the length and arrangement of letters owing to the fact that these letters cover a wide range of subjects in different lines of business. In any one line of business this difference in length is not likely to be found. Consequently the use of the Self-starter in the business office will be found easier to handle. On the other hand, the extensive use of the Self-starter required by the letters in the Rational text will furnish the student a training that he would not otherwise get, and give him a technical skill in the use of it that will be of immense value in his later practice. It is important that

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the teacher emphasize the value of the Self-starter and see that students *use it* in all letter writing. The use of time-saving devices like this should not be postponed until later in the work. The operation of such devices is merely a matter of habit; right habits should be thoroughly established at the start.

It is recommended that the teacher secure a copy of the instructions issued by the Remington Company for the use of the Self-starter. The subject is also covered in the Rational Typewriting texts.

**Touch Operation of the Self-starter:** It is important to note that the Self-starter operates both forward and backward. The keys should be operated by touch and entirely with the fingers of the left hand so that the operation of the Self-starter keys can be carried on simultaneously with the return of the carriage. The following is the simplest and best method so far devised for operating the Self-starter by touch:

As the right hand is moved to the line-spacing lever, the left hand should be moved upward and the fingers placed in position on the red Self-starter keys, the little finger resting on the first key (marked "1 Tab. Street"), the third finger on key 2, the second finger on key 3 and the first finger on key 4. The first key ("1 Tab. Street") is operated by the little (4th) finger; key 2 with the third finger; key 3 with the second finger; keys 4 and 5 with the first finger. The Self-starter keys should be *depressed firmly*—not struck with the staccato blow used on other keys, and should not be released until the carriage has stopped at the right place. Both hands can then be returned to the keyboard simultaneously.

The student should practice moving his left hand from the keyboard up to the Self-starter keyboard until the cor-

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rect reach is firmly established. There should be no necessity for looking to find the Self-starter keys any more than there is for finding the figure keys.

**The Underwood Tabulator:** The tabulator on the Underwood Typewriter performs the same function as the Self-starter on the Remington, except that there is but one key and it is necessary to depress this for each stop. The operation of this device is covered on page 44 of the Revised Edition and page 43 of the Medal of Honor Edition. The teacher is referred to these for further information.

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## ECONOMY OF MOVEMENT IN TYPEWRITING

By Rupert P. SoRelle in the "Gregg Writer"

Have you ever made a scientific study of your efficiency as a typist? Probably not. But it is worth your serious consideration.

The measure of your efficiency is not determined by the amount of effort you actually use in writing a given number of words, but by the effort actually required. All that is used above the actual requirement is absolute waste—not only waste of effort, but waste of time.

"To Mr. Frank B. Gilbreth, distinguished for his 'motion studies,' when he was in England, was pointed out a girl putting labels on boxes with what looked like marvelous speed. He took out his stop-watch and timed her. She was supposed to be the fastest known girl at this work. He noticed that, although all of her motions were fast, about half of them were needless. He suggested a different method, and the second time she tried it she did twice as many boxes in a given length of time, to her surprise, as she thought she was not going as fast."

When I read this paragraph in *Collier's* recently it brought to my mind some studies I had made, a year or so ago, of the movements used in typewriting. What is true of this girl in her work of pasting labels on boxes, is equally true of thousands of typists who cannot get speed.

Some time ago a typist complained to me that he couldn't get speed, no matter how hard he tried. I asked him to write for me. He consented. I gave him fifteen minutes' copying to do, and promptly went about my business. He thought I was going to "time" him to see how rapidly he

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could write; what I wanted was to see him write without his being actually conscious of it. In a few minutes he settled down to business, and I then surreptitiously kept my weather eye open for his troubles.

Here are some of the things he did:

In returning the carriage he used both hands, thus making it necessary to return both to the keyboard every time.

At the end of a sentence he would depress the shift-key, strike the period, release the shift-key, strike the space bar twice, then depress the shift-key again and strike the capital.

In shifting he drew his whole hand down to the lower bank of keys, instead of merely dropping the little finger to the shift-key and maintaining correct hand position.

To indent for paragraphs he would return the carriage and space five times with the thumb, instead of using the Self-starter or tabulator key.

He had so little independent finger control that practically all the fingers did the work on each stroke. That is, when he would strike "b," for example, the second, third and fourth fingers of that hand would fly up into the air, and naturally had to be brought down again. He also raised his fingers about twice as high above the keys as was actually necessary.

He kept continually glancing at the machine instead of keeping his eyes glued on the copy. He kept changing his position in the chair. On coming to any infrequent character he had to shift his gaze to the machine to find the character. In making the reach from "c" to "t," or from "m" to "y," or in other combinations where the finger had to travel over one bank of keys, his finger took a roundabout, rather uncertain direction instead of going in a direct line.

But this is sufficient to make clear the point I wish to emphasize. A large number of the movements he used in writing were absolutely wasted. They accomplished nothing

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and they consumed time.' When I pointed out these defects he could hardly believe it, but I asked him to write slowly and watch for himself. The force of habit was so strong that he soon acknowledged that what I said was perfectly true. By following the obvious course he was immediately able to increase both his speed and his accuracy. He could not, of course, *double* his speed, but he made so appreciable a gain that he was encouraged to set about eliminating all false movements in his writing. In another test, after a few weeks' drill, he had increased his speed to a marvelous degree.

Analyze your own style of writing. Get someone to watch you for a time each day—someone who is competent to do it—and to record the false moves you make in writing. You will be astonished at the result. Then do some slow, deliberate work to overcome your bad habits—and you will be astonished again. Reducing the number of movements necessarily increases the speed.

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## DETAILED SUGGESTIONS FOR HANDLING THE REVISED EDITION

The revised edition is designed primarily for a high school course of from one and a half to two years. It is used, however, in a large number of private business schools, and owing to the longer periods and the advantage of two periods a day with the resulting gain that comes from intensified work, the work can be completed in from six to eight months. The suggestions given here apply more particularly to the one-and-a-half-year course—fifty-four weeks in a high school which devotes one period a day to typewriting. In private schools where two periods a day are given to the subject, there will be no change in the schedule, but it can be carried out in half the time indicated.

**Résumé of Schedule:** The usual schedule in high schools covers a period of forty weeks in the school year, but since this includes the Christmas holidays, the Easter vacation, and other holidays there are, under ordinary circumstances, but thirty-six weeks that can be devoted to school work.

In a general way the schedule is planned on the following basis:

**The Fingering Technique,** embracing lessons one to eighteen, inclusive, will require eighty periods. In addition to this, eight reviews of one period each and four monthly tests of one period each should be added, making a total of nineteen weeks devoted to the subject.

**Speed Studies:** It is recommended that "Speed Studies" be introduced at this time instead of "Business Correspondence," and that six weeks be devoted to this work. It will



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not be possible to finish all the "Speed Studies" in this time, but provision is made later on for completing this work in the beginning of the third semester in high schools.

**Business Correspondence:** Forty-seven periods will be required to complete the work on the "Business Correspondence" section. In addition to this eight periods will be devoted to reviews and tests. A review or test should be given at the end of the first two weeks and one each week thereafter. The total time required for this section will be eleven weeks, making a total for all three sections of thirty-six weeks.

## SCHEDULE FOR REVISED EDITION

### PART I

(The general reviews and tests provided in the résumé are to be introduced at regular intervals. The reviews indicated in the schedule are to be conducted quickly, not more than five minutes being devoted to the subject.)

#### FIRST LESSON

**First Period** The first period should begin with a general explanation of the typewriter and an outline of the method of operation including the mechanical features that are necessary at the start. The steps in the presentation are:

(a) Position at the machine (see page 5).
(b) Method of inserting and removing the paper.
(c) Spacing for a new line and returning the carriage.
(d) Releasing the carriage.
(e) The position of the hands and arms.
(f) General explanation of the keyboard (see charts on page 4 Rev. Ed.).
(g) Touch and fingering (see page 6 Rev. Ed.).

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(h) The central division of the keyboard.

(i) "How to Begin" (see pages 6 and 7).

(j) Enough preliminary work should be given to satisfy the student's desire to write something, as he would feel that he had made no progress unless he had done so. This work will include the first exercise on page 9.

**Second Period**

(a) Review previous lesson. Drill on the central division of the keyboard, particular attention being given to making reaches, the general method of operation, and memorizing the keys in the central division with relation to the guide keys.

(b) Drill on locating individual keys in the central division.

(c) Second exercise. The teacher should supervise the practice work closely.

**Third Period**

(a) Review previous lesson, as outlined, devoting some time to keyboard drills and memorizing location and reaches.

(b) Third exercise. The teacher should supervise the practice work closely.

**Fourth Period**

(a) Review previous work.

(b) Test student's knowledge of the keyboard and give a drill in locating the keys and making reaches.

(c) Drill on writing such sentences as the following, omitting capitals and periods, filling up one line of each sentence:

1. Try my gun.
2. Buy my ruby rug.
3. Try my hymn.
4. Hugh burnt my fur muff.
5. Hunt my funny jug.
6. Thy untruth hurt.
7. Hug truth but bury untruth.
8. Hugh burnt my mummy.

(d) Concentration exercise on writing the individual words as dictated.

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## SECOND LESSON

**First Period**
(a) Review mechanical features of the machine and explain the new ones, securing sufficient drill to be sure that the student fully understands their operation.
(b) Explanation of the new section of the keyboard with memory drills on new letter locations.
(c) First exercise.

**Second Period**
(a) Review first period's work.
(b) Assign second exercise.
(c) Concentration exercises.

**Third Period**
(a) Review and drills.
(b) Third exercise.

**Fourth Period**
(a) Review and drills.
(b) "Supplementary Exercise" (page 10).

**Fifth Period**
(a) Review and drills.
(b) "Words of High Frequency" (page 10).

## THIRD LESSON

**First Period**
(a) Explanation of features of machine.
(b) Drill on new section of keyboard, and drill on memorizing.

**Second Period**
(a) Review and keyboard drill.
(b) Second exercise.

**Third Period**
(a) Review and keyboard drill.
(b) Third exercise.

**Fourth Period**
(a) Review and keyboard drill.
(b) "Special Third Finger Practice" (page 12).

**Fifth Period**
(a) Review and drill.
(b) "Supplementary Exercise" (page 12).

**Sixth Period**
(a) Review and drill.
(b) "Words of High Frequency" (page 12).

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## FOURTH LESSON

**First Period**
(a) Review mechanical features of machine; take up new ones.
(b) Explain new section of keyboard and drill on memorizing and locating letters.
(c) First exercise.

**Second Period**
(a) Review.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) "Supplementary Exercise" (page 14).

**Fifth Period**
(a) Review and drill.
(b) "Words of High Frequency" (page 14).
(c) Concentration drill.

## FIFTH LESSON

**First Period**
(a) Review and drill. The keyboard should be thoroughly memorized by this time. It would be well for the teacher to test the students' knowledge of the keyboard and assign special practice for those not able to locate the keys quickly and accurately.
(b) Explain capital letters, and drill (page 16).
(c) First exercise.

**Second Period**
(a) Review and drill.
(b) Second exercise.

**Third Period**
(a) Review and drill.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) "Supplementary Exercise" (page 16).

**Fifth Period**
(a) Review.
(b) "Words of High Frequency" (page 16).

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### SIXTH LESSON

**First Period**
(a) Review keyboard.
(b) First exercise.

**Second Period**
(a) Review and concentration drill.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) "Supplementary Exercise" (page 18).

**Fifth Period**
(a) Review.
(b) "Words of High Frequency" (page 18).

### SEVENTH LESSON

**First Period**
(a) Explanation of fingering on figure keys; drills in locating and memorizing.
(b) First exercise.

**Second Period**
(a) Review and drill on figures.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review and drill on figures.
(b) "Words of High Frequency" (page 20).

**Fifth Period**
(a) Review of first exercise.
(b) Study "Numerals" (page 20).

### EIGHTH LESSON

**First Period**
(a) Review figure keyboard and making reaches.
(b) Take up new characters, drill on memorizing locations with relation to figures and other keys.
(c) First exercise.

**Second Period**
(a) Review of first exercise.
(b) Second exercise.

**Third Period**
(a) Review of second exercise and characters.
(b) Third exercise.

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**Fourth Period**
(a) Review.
(b) "Words of High Frequency" (page 22).

**Fifth Period**
(a) Review of entire lesson.
(b) Study "Numerals."

## NINTH LESSON

**First Period**
(a) Review.
(b) First exercise.

**Second Period**
(a) Review.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) "Words of High Frequency" (page 24).

**Fifth Period**
(a) Review of entire lesson.
(b) Study "Spacing after Punctuation Marks" (page 24).

## TENTH LESSON

**First Period**
(a) Review of figures and special characters.
(b) First exercise.

**Second Period**
(a) Review.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) Fourth exercise.

**Fifth Period**
(a) Review of entire lesson.
(b) "Words of High Frequency" (page 26).
(c) "Things You Ought to Know." *

* It is not expected that all students will write this; it is assigned for study and quiz.

## ELEVENTH LESSON

**First Period**
(a) Review figures and characters.
(b) First exercise.

**Second Period**
(a) Review.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) Fourth exercise.

**Fifth Period**
(a) Review of entire lesson.
(b) "Words of High Frequency" (page 28).
(c) "Things You Ought to Know."

## TWELFTH LESSON

(See instructions for twelfth and thirteenth lessons, page 30.)

**First Period**
(a) Review.
(b) First exercise.

**Second Period**
(a) Review.
(b) Second exercise.

**Third Period**
(a) Review.
(b) Third exercise.

**Fourth Period**
(a) Review.
(b) Fourth exercise.

**Fifth Period**
(a) Review.
(b) "Words of High Frequency" (first group, page 30).
(c) "Things You Ought to Know" (page 30).

## THIRTEENTH LESSON

Same plan as twelfth lesson. Five periods required. Include second group of "Words of High Frequency" (page 30).

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### FOURTEENTH LESSON

(One period is to be devoted to each exercise except the fourth, which may be utilized in part for acceleration drills.)

| | |
|---|---|
| First Period | First exercise. |
| Second Period | Second exercise. |
| Third Period | Third exercise. |
| Fourth Period | Fourth exercise. |
| Fifth Period | First group of "Words of High Frequency" (page 33). |

### FIFTEENTH LESSON

(Three periods required.)

Follow the same plan as outlined for fourteenth lesson except that the "Words of High Frequency" on page 33 will be assigned for the lesson indicated. It is planned that each exercise will consume the time of one period. That is, one period should be devoted to repeating the exercise as many times as possible.

### SIXTEENTH LESSON

(Three periods required.)

### SEVENTEENTH LESSON

(Two periods required; there will be sufficient time left for a thorough review.)

### EIGHTEENTH LESSON

(Two periods required; there will be sufficient time left for a thorough review.)

**The Speed Studies:** It is recommended that the "Speed Studies," beginning on page 101, be introduced at this time rather than to plunge the student into the arrangement of business letters. The "Speed Studies" are intended to give the student a good working speed in typing. Under ordinary circumstances the student has not acquired sufficient speed on the typewriter at this time to undertake the business

correspondence section. By changing the plan of the book and introducing "Speed Studies," the foundations for correspondence work will be more firmly laid. See introduction to and "Method of Preparing Speed Studies" given on page 100 of the Revised Edition.

The first thirty-five minutes of the period should be devoted to practicing the "Speed Studies" and the last ten minutes to testing the student's ability in writing.

Six weeks are to be devoted to the subject at this time. This will not be sufficient time to complete the work but provision is made to complete this work at the beginning of the second year's work.

## PART II

## INTRODUCTION TO BUSINESS CORRESPONDENCE

The points discussed in this section should be carefully gone over with the class groups and the introduction assigned for home study. This should be followed by a discussion of the points. The teacher can add very greatly to his explanation by utilizing illustrations placed on the blackboard, or specimens of actual letters that conform to good usage.

The subjects of "Manifolding," "Making Inclosures," "Corrections and Erasures," should be discussed with the class several times during the progress of the work on business correspondence.

**Model Letters:** Model letters showing the various arrangements are presented to impress upon the student the correct arrangement of these forms before each section is undertaken. This is followed by constructive work to develop the student's ability to arrange matter correctly. These points should be brought out clearly by the teacher before the work on "Business Correspondence" begins.

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The model letters should be copied before beginning the constructive work. Two forms of each are given to deepen the impression.

It is not thought necessary to present, in correct form, all of the letters given in the constructive exercises, as the teacher from studying the models and the illustrations given in the following outline will have already gained a correct impression of the arrangement of these forms. One exercise only is shown in the illustrations to give the correct idea of the type of letters occurring in the constructive exercises.

Particular attention is called to "Directions for Lessons Nineteen to Thirty-four," on page 46.

**NINETEENTH LESSON** (Five periods)

Require copies Models I and II and one each of the five exercises.

**TWENTIETH LESSON** (Three periods)

On this and Lessons 21–31 inclusive, follow plan for Lesson 19.

**TWENTY-FIRST LESSON**
(Three periods)

**TWENTY-SECOND LESSON**
(Three periods)

**TWENTY-THIRD LESSON**
(Three periods)

**TWENTY-FOURTH LESSON**
(Four periods)

**TWENTY-FIFTH LESSON**
(Two periods)

**TWENTY-SIXTH LESSON**
(Four periods)

**TWENTY-SEVENTH LESSON**
(Three periods)

**TWENTY-EIGHTH LESSON**
(Two periods)

**TWENTY-NINTH LESSON**
(Two periods)

**THIRTIETH LESSON**
(Two periods)

**THIRTY-FIRST LESSON** (Two periods)

**THIRTY-SECOND LESSON** (Three periods)

Discuss telegrams and cablegrams and illustrate with forms which you have already prepared on regular telegraphic blanks. These should be handed around to the class for inspection. If possible, use regular telegraphic blanks for all telegrams and cablegrams.

### THIRTY-THIRD LESSON (Two periods)

Discuss the points brought out in the instructions on page 88.

### THIRTY-FOURTH LESSON (Two periods)

It is important that clear and comprehensive instructions be given in connection with rough drafts. There is hardly any more important or complicated work that the typist is called upon to do. Business men in revising matter that they have written do not always indicate where insertions should go, and it is oftentimes difficult to understand just what their interlineations mean.

A study of these forms will show the student some of the difficulties he may expect to encounter. The student should first read the document he is to copy very carefully, and, if necessary, indicate the punctuation and make any corrections necessary on the rough draft before beginning to copy it. He should understand that all necessary corrections are to be made whether they are incorporated in the rough draft or not. He must be encouraged to use his judgment constantly.

### THIRTY-FIFTH LESSON (Two periods)

Follow the suggestions given for the thirty-fourth lesson.

### THIRTY-SIXTH LESSON (Two periods)

It is important that the necessary facts in connection with addressing envelopes should be thoroughly understood by the student. It will be well for the teacher to review the "Self-starter" and "Tabulator," at this time, as the use of these devices in addressing envelopes will save a vast amount of time, especially if the "stair step" method of indentation is used—and that is the most common form. Much time can be saved if the method of addressing indicated on page 94 is adopted. Envelopes of various sizes should be provided by the student for this work.

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## PART III

## INTRODUCTION TO STUDIES IN THE ACQUIREMENT OF SPEED

The "Speed Studies"—Lessons 37–45 inclusive—have been discussed in another place.

## INTRODUCTION TO THE PREPARATION OF MANUSCRIPTS

The introduction should be studied and the points brought out developed by the teacher. If possible, secure various examples of this kind of work for the inspection of the students. It will arouse interest and enthusiasm.

**FORTY-SIXTH LESSON** (One period)

Copy illustrations I, II, III, IV. As the exercises in this section present no difficulties whatever, and as the student should have a good working speed by this time, it is assumed that one period will be sufficient to make satisfactory copies.

**FORTY-SEVENTH LESSON** (One period)

Copy illustrations, V, VI, VII. The copy in the Manual can be followed to the letter.

**FORTY-EIGHTH LESSON** (One period)

Exercises 1 and 2.

**FORTY-NINTH LESSON** (Two periods)

Exercises 1, 2, and 3.

**FIFTIETH LESSON** (One period)

"Specification for Structural Steel" (2 pages).

**FIFTY-FIRST LESSON** (One period)

"Constitution."

**FIFTY-SECOND LESSON** (Two periods)

"Regents Shorthand and Typewriting Examination."

FIFTY-THIRD LESSON (One period)

Exercises 1 and 2.

FIFTY-FOURTH LESSON (Five periods)

It will be noted that the following articles only are to be copied: Sections 33, 34, 35; Section 43; the tabulation entitled "Statement made by the Treasury Department," page 139; the "Rough Draft" on page 140; and the sections on "Penmanship," "Report Writing," and "Arithmetic," on page 143.

## PART IV

## INTRODUCTION TO TABULATION AND BILLING

The importance of ample practice in tabulation and billing is often underestimated by the teacher. Plenty of practice in this work will be found in this section of the Revised Rational Typewriting Manual. The teacher should discuss very thoroughly the topics mentioned in the introduction and utilize the blackboard for illustrations.

**Decimal Tabulator:** It is recommended that the teacher secure a copy of the book of instructions of the tabulator issued by the typewriter companies where he will find other illustrations of the use of the tabulator. The subject, however, is covered quite comprehensively in the Revised Edition. This subject could profitably be left until the student begins his work in Office Training later in the course.

**Billing:** If the teacher has a knowledge of bookkeeping, he will be able to make much clearer this phase of the student's work. In lieu of this he can consult billing clerks who are using the typewriter for this purpose. He can also add to his information by securing the books on the subject issued by the typewriter companies. Regular billing machines are equipped with capital letters only, but many concerns use

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the regular typewriter for this purpose. Consequently most of the exercises can be written with small type. The models given both in the Rational book and in this "Key" will serve as guides.

**FIFTY-FIFTH LESSON** (Six periods)

The student should be instructed to make one copy of the model and use that as a guide. Type out each exercise on a separate sheet. See instructions on page 150. These instructions will hold for Lessons 55–58 inclusive.

**FIFTY-SIXTH LESSON** (Four periods)

**FIFTY-SEVENTH LESSON** (Four periods)

**FIFTY-EIGHTH LESSON** (Four periods)

**FIFTY-NINTH LESSON** (Two periods)

Exercises 1 and 2.

**SIXTIETH LESSON** (Two periods)

Exercises 1 and 2.

**SIXTY-FIRST LESSON** (Two periods)

Exercises 1 and 2.

**SIXTY-SECOND LESSON** (Two periods)

Exercises 1 and 2.

**SIXTY-THIRD LESSON** (Two periods)

Exercises 1 and 2.

**SIXTY-FOURTH LESSON** (Two periods)

Exercises 1–4 inclusive.

**SIXTY-FIFTH LESSON** (Two periods)

Exercises 1–4 inclusive.

**SIXTY-SIXTH LESSON** (Two periods)

The student should be cautioned about the necessity for making exact duplicates of the first and second exercises. No change in the spacing or form is permissible.

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## INTRODUCTION TO LAW AND BUSINESS PAPERS

Much interest will be added to the discussion of this topic if examples of the various papers can be secured by the teacher to pass around for the inspection of students. These papers should be local, preferably. The method of preparing and using manuscript covers should be thoroughly explained.

### SIXTY-SEVENTH LESSON (Two periods)

Exercises 1 and 2. The papers should be covered and indorsed. This plan should be followed on all the remaining papers in the Rational Typewriting Manual.

### SIXTY-EIGHTH LESSON (Two periods)

Exercises 1, 2, and 3.

### SIXTY-NINTH LESSON (Two periods)

Exercises 1 and 2.

### SEVENTIETH LESSON (Two periods)

Exercises 1 and 2.

### SEVENTY-FIRST LESSON (Two periods)

One exercise—two pages.

### SEVENTY-SECOND LESSON (Two periods)

Exercises 1 and 2.

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## KEYS TO CONSTRUCTIVE EXERCISES

## REVISED AND MEDAL OF HONOR EDITIONS

The Keys to the problems of both the Revised and Medal of Honor Editions have been assembled in one place for convenience in reference. Model forms of all the constructive exercises have not been presented, as it is thought that if the different types of letters and problems are fully illustrated the teacher will not need further assistance.

All of the problems presented have been written with an ordinary pica-type machine on regular letter-size sheets, 8½ x 11 inches, and reduced to the proper size for a page in the Manual. The correct proportions of type to page, and of margins to the written mass, have therefore been maintained. Where small type (élite) machines are used in the schools there necessarily will be some revision of arrangement, but as the principle of arrangement is the same, forms of these are unnecessary.

The aim in presenting the models has been to show correct form rather than to afford the teacher an accurate guide as to the subject matter of the letter. The latter, however, is correct in the models, as it also is in the Rational books, so that checking up of errors can be made with the minimum of effort.

Special attention is drawn to the "Keys" to the rough drafts, bills and statements, etc. The corrections on the former are important as showing what the stenographer should accomplish. Obviously, all necessary corrections have been made, even to the extent of changing the wording and form where these details have not been fully included in the instructions.

The bills and statements have been written in capitals, for this is the style of type usually used on regular billing machines. The Rational books, however, show examples of bills prepared on regular type machines.


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March 24, 1919

Mrs. Walter Bruce Scott
1107 Broadway
White Plains New York

Dear Madam:

Replying to your last communication, we are very sorry that the net has not as yet been delivered. Inasmuch as the package was forwarded from our store promptly and correctly addressed and no request to have it insured was made, we are unable to assume responsibility.

However, the postal authorities have been instructed to trace the shipment and we hope that through their efforts a prompt delivery will be made.

Yours very truly,

SV

ILLUSTRATION OF SHORT, SINGLE-SPACED LETTER

REVISED EDITION
LESSON 19
EXERCISE 4

M OF H EDITION
LESSON 18
EXERCISE 4

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March 24, 1919

Holcomb & Hoke Manufacturing Co
552 Van Buren Street
Indianapolis, Indiana

Gentlemen:

We have asked you repeatedly to trace one case containing standard bleached goods, agate buttons, men's celluloid collars, linen damask cloths, chain purses, which were shipped on May 5 by S. T. Bloomingeton. We inclose bill of lading to show you how and when these goods were shipped. As you do not seem to be able to trace them or find where they were sent, we have taken the liberty of charging you with the case of goods and hope you will make an early remittance for same.

Youre truly,

SV

ILLUSTRATION OF SHORT, DOUBLE-SPACED LETTER

REVISED EDITION
LESSON 20
EXERCISE 2

M OF H EDITION
LESSON 19
EXERCISE 2

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March 26, 1919

Miss Emaline Sherman
62 Park Street
Fall River, Mass.

Dear Madam:

We regret exceedingly to be obliged to ask you to wait a while longer for your raincoat. You have been disappointed, we know, but the long rainy season has caused such an immense demand for raincoats that we could not poseibly keep up with the orders.

We have sold a thousand raincoats a day more than last year We have done all in our power to take care of this immense business, but no one could anticipate such a great and continued demand. Our factories simply could not get perfectly rubberized material fast enough. Of course we accept only perfect, tested garments, and if you wait the one you get will be thoroughly satisfactory, we feel sure

If you cannot wait about ten days longer, and wish your money returned, please write us on the back of this letter and we will be glad to send it to you at once.

Yours truly,

SV

ILLUSTRATION OF AVERAGE LENGTH SINGLE-SPACED LETTER

REVISED EDITION
LESSON 21
EXERCISE 2

M OF H EDITION
LESSON 20
EXERCISE 2

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March 26, 1919

Lynn Motor Car Company
Lynn, Massachusette

Gentlemen:

Since writing you under date of yesterday, we have been informed by Mr. Jamee Lanley that the vibration caused by your hammere is noticeably more violent than heretofore. He alao informs us that eeveral residents of the neighborhood have complained of thie; othere allege that the plaster in their houses is beginning to crack and peel off becauee of the hammering.

Mr. Lanley'e neighbors are willing to join with him in taking etepa to force the ceeeation of what they claim ie becoming an unbearable nuieance. Mr. Lanley does not wieh to be unreaeonable in this matter, and only aesumed the burden of taking the matter up with you because poeeibly the damage to hia house is greater than to any other, but he does not wieh you to think that he ia the only one who is annoyed, and he ia willing to eettle the matter with you upon any reaeonable baeie.

We muet, however, at this time, reapectfully notify you that unleee eomething definite in thie matter ie done on or before next Monday we ehall be compelled to take further proceedings.

Very truly youre,

SV

ILLUSTRATION OF AVERAGE LENGTH SINGLE-SPACED LETTER

REVISED EDITION
LESSON 22
EXERCISE 2

M OF H EDITION
LESSON 21
EXERCISE 2

Univ Calif - Digitized by Microsoft ®

March 26, 1919

Messrs. Victor & Hodges
321 Chestnut Street
Philadelphia, Pennsylvania

Gentlemen:

Your letter of the 12th inst. to John S. Strong of this city, relating to the claim of George Brown regarding the commission, has been referred to us for reply.

As we understand this matter, the relation of the two parties to each other in this deal was never that of owner and real estate agent, and there was never any agreement between the parties for any particular commission.

Mr. Strong's understanding was that he promised to give Mr. Brown a bonus for making this sale, the size of the bonus to be determined by Mr. Strong. From the letter written by Mr. Brown, we should judge that he accepted the $75.00 on this understanding, thereby waiving any claim for any commission. Under the circumstances, we do not see how Mr. Strong is liable.

Very truly yours,

SV

ILLUSTRATION OF BLOCK FORM LETTER

REVISED EDITION
LESSON 23
EXERCISE 4

M OF H EDITION
LESSON 22
EXERCISE 4

Univ Calif - Digitized by Microsoft

March 28, 1919

Mr. C. M. Glaee
261 Prospect Street
Brooklyn New York

Dear Mr Glaee:

Please etraighten me out on the Summere order. We have received for eome monthe past letters from Mr. Evane etating that he had been pereuaded to buy a new car; and yet I find Mr. Evane'e original order 5138 echeduled September 8, wae ohanged on September 2 to Mr. Albert Henderson, Erie, Pennsylvania, and received a supplementary on the 18th of October changing your demonetrator, S. O 6722 echeduled October 29, to Mr. Evane

This hae not yet been returned to you. I note that it is etamped, however, at the new price. There seems to be eome possibility that this ealee order wae advanced to October 8, but it does not appear on your supplementary. Did you eubstitute Mr. Evane'e oar for Mr. Henderson'e and then put Mr. Evans on this demonetrator at a later date? So far as the billing at the new price ie oonoerned, will Mr. Evans be expected to pay the new price? If not, will you take the old car on whioh you changed ownership at the new price?

I cannot anewer Mr. Even'e inquiry (and am telling him eo per oopy attached) until I get further word from you.

Youre very truly,

SV

ILLUSTRATION OF HANGING INDENTION LETTER

REVISED EDITION
LESSON 24
EXERCISE 2

M OF H EDITION
LESSON 23
EXERCISE 2

Univ Calif - Digitized by Microsoft ®

March 27, 1919

Dear Mr Pindell:

Your letter does credit to your delicate sense of propriety and serves to increase, if that were possible, my admiration for you and my confidence in your eminent fitness for the mission which you now decline. I can but yield to your judgment in the matter, because it is clear to me that, feeling as you do, whether you are fully justified in that feeling or not, you would not be comfortable or happy in the post. I therefore cannot insist. You will allow me, however, I hope, to express my deep regret.

I know your quality so well and was so anxious to see you at St. Petersburg that I feel a keen disappointment. It is only a very imperfect consolation that I may now again express my unqualified confidence in your ability, your character, your discretion, and your entire suitability for such a post.

Cordially and sincerely yours,

Mr. Henry M. Pindell
Peoria, Illinois

SV

ILLUSTRATION OF FORMAL STYLE LETTER

REVISED EDITION
LESSON 25
EXERCISE 1

M OF H EDITION
LESSON 24
EXERCISE 1

Univ Calif - Digitized by Microsoft

March 27, 1919

Mr. C. J. Robineon
26 Oliver Street
St. Louis, Mo.

Dear Sir:

We appreciate your reply to our letter, and we have carefully checked through the various items on your list and the prices quoted. Every price on the list has been out to bed rock figures, with the exception of the one item, Weather Proof Wire number 8. Since this quotation was made, changes in the market have enabled us to make a lower price on the wire, and we are, therefore, changing the price of $28.50 to $24.00 for the 1500 feet. This is the only reduction in price we can offer in connection with the entire list.

We note what you say about our price on the washing machine being $5.00 higher than other prices you have secured. We do not doubt for a moment that you can secure prices on washing machines, not only $5.00 lower than ours, but possibly $10.00 lower. However, our machine is a standard make, absolutely guaranteed in every particular, and we know positively that it is the equal of any machine which is selling on the open market to-day for $90.00.

You are a business man, and you realize that we could not afford to make such a statement unless we were prepared to back it up. Our price on the electric lighting plant is the lowest we can possibly make. You remember, when you were figuring on both the inclosed and the open plant systems, and you remember also that we were able to quote you figures practically $100.00 below the quotation which you had from another concern.

If you are in the market for a really efficient electric lighting system, you cannot save money by paying less than the price we have quoted, and we are confident that you cannot secure elsewhere a system that is as efficient as ours, without paying a considerably higher price than we ask. The prices on the entire line of electric fixtures listed in your inquiry are our current catalog prices. These prices, also,

ILLUSTRATION OF TWO-PAGE LETTER

REVISED EDITION
LESSON 26
EXERCISE 3

M OF H EDITION
LESSON 25
EXERCISE 3

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Mr. C. J. R. #2

are as low as we can possibly make them, and they are the same whether a customer is buying only a small quantity or is buying thousands of dollars worth. We are confident that, quality considered, you cannot equal these prices elsewhere.

As you have requested, we are returning the entire list to you. We believe that you are really seeking, not a cheap plant but an efficient plant at a low price, and that is what we are offering you. We feel confident, also, that after you have carefully considered the whole matter and have compared our prices with those which others are asking, you will place this order with us.

Yours truly,

SV

SECOND PAGE OF TWO-PAGE LETTER

REVISED EDITION
LESSON 26
EXERCISE 3

M OF H EDITION
LESSON 25
EXERCISE 3

Univ Calif - Digitized by Microsoft ®

March 27, 1919

Mr. D. Keith
c/o Ford Automobile Company
Chicago, Illinois

Dear Sir:

I represent the city of Ogleaby as corporation counael

The city of Ogleaby is five miles from La Salle and there are several of your cars being used by different people in carrying passengers to and from LaSalle and Ogleaby. Some of the cars carry as many as six, seven, and eight people at a time and the aldermen at Ogleaby are of the opinion that the cars are being overloaded and that there is great danger of a serious accident happening if they are permitted to carry this number of people. They wanted me to prepare an ordinance limiting the number of people to be carried, but, of course, not being an engineer and not knowing the carrying capacity of any of the cars, either yours or others, I wanted to find out, if I could, where I could get some information as to the carrying capacity of the different kinds of cars.

I presume that, so far as your cars are concerned, you have this at hand. Would it be asking too much of you to send me a statement showing what the carrying capacity of your machines is, that is, the maximum capacity?

Yours very truly,

SV

ILLUSTRATION OF AVERAGE LENGTH SINGLE-SPACED LETTER

REVISED EDITION
LESSON 27
EXERCISE 3

Univ Calif - Digitized by Microsoft ®

March 27, 1919

Mr. James C. McReynolds
Attorney-General
Washington, D. C.

Dear Mr. McReynolds:

The rapid and unwarranted increase in the price of foodstuffs in this country upon the pretext of the condition existing in Europe is so serious and vital a matter that I take the liberty of calling your attention to it.

I would be very much obliged if you would inform me whether there is under existing law any action which the department of justice could take either by way of investigation or legal process, and what federal legislation, if any, would in your judgment be justifiable and warrantable in the circumstances.

I feel that this is a matter which we cannot let pass by without trying to serve the country. Certainly the country ought to be defended, if possible, against men who would take advantage of such circumstances to increase the price of food and the difficulties of living.

Faithfully yours,

SV

ILLUSTRATION OF AVERAGE LENGTH LETTER

REVISED EDITION
LESSON 28
EXERCISE 4

Univ Calif - Digitized by Microsoft ®

March 27, 1919

Marx & Haas Company
St. Louis, Mo.

Gentlemen:

We have your letter of the 13th inst., acknowledging our order $3692. and are very much surprised to note that you state that you have no such number as 873. If you will refer to your letter of the 1st inst., you will find that you submitted same, and we are inclosing a part of the swatch sent us with your own ticket attached.

We will certainly appreciate it very much if you will give this order your immediate attention, as we have taken this special order and have promised delivery according to your communication of October 1.

Yours very truly,

SV

ILLUSTRATION OF DOUBLE-SPACED SHORT LETTER
REVISED EDITION
LESSON 29
EXERCISE 5

Univ Calif - Digitized by Microsoft ®

March 27, 1919

Mr. Pondray Williamson
1233 Sunnyside Avenue
Los Angeles, Cal.

Dear Sir:

Inclosed are some samples of imported shirtings that will harmonize with the suit which you selected in our Custom Tailoring Section.

If you are interested, but do not find it convenient to call at our Custom Shirt Section on the second floor of the Store for Men, we shall be glad to have our representative call upon you with a full line of samples from which you can make a selection.

Very truly yours,

SV

ILLUSTRATION OF SHORT, DOUBLE-SPACED LETTER

REVISED EDITION
LESSON 30
EXERCISE 1

Univ Calif - Digitized by Microsoft®

HOTEL IMPERIAL
New York City

March 27 1919

Mr. John C. Harding
Member Board of Eduoation
Chicago, Illinois

Dear Sir:

To avoid possible misunderstandings in the future, I would be greatly obliged if any time a suggestion is made to you that the city administration desires a certain line of conduct on your part in reference to the Board of Education, you would confer with me to learn whether the suggestion emanates from this office or not.

I have tried to interfere as little as possible in matters coming under the jurisdiction of the Board of Education. I have also made it a rule, when I have had anything to say, to confer directly with the members rather than by word or message.

Hereafter, whenever I have occasion in any way to communicate with the Board, either individually or collectively, I shall do so directly, and all suggestions purporting to come from me may be regarded as unauthorized.

Yours very truly,

SV

ILLUSTRATION OF BLOCK FORM LETTER

REVISED EDITION
LESSON 31
EXERCISE 1

Univ Calif - Digitized by Microsoft ®

Philadelphia, Pa.
March 27, 1919

Gentlemen:

Your letter to the Secretary of State, dated, if I recollect rightly, the 5th instant, intimating, among other things, that you had failed in an attempt which had been made to import workmen from Scotland, equally with that for obtaining them from Holland, fills me with real concern; for I am very apprehenaive, if your next campaign in the Federal City is not marked with vigor, it will cast such a cloud over this business, and will so arm the enemies of the measure, as to enable them to give it, if not its death blow, a wound from which it will not easily recover.

Everything, in a manner, depends upon the celerity with which the public buildings are then carried on; sale of lots, private buildings, good or evil reports, all will be regulated thereby. Nothing, therefore, short of the absolute want of money ought to retard the work.

With great and sincere regard and esteem, I am, Gentlemen,

Respectfully yours,

SV

## KEY TO ROUGH DRAFT

REVISED EDITION
LESSON 34
EXERCISE 1

M OF H EDITION
LESSON 27
EXERCISE 1

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S P E C I F I C A T I O N

TILE ROOFS:

All roofs to be tiled will be filled with concrete by the mason, graded to the leaders and finished with a floated coat of Portland cement mortar. On this surface, this contractor shall apply a coat of asphaltic cement, consisting of 90% of straight-run coal tar pitch and 10% of refined Trinidad asphalt, applied hot, and on same waterproof in five thicknesses, using the best quality of saturated roofing felt, to weigh not less than 15 lbs. per 100 square feet of single ply. The felt to be laid with a lap of one-fifth width of the sheets, and each layer and all laps must be solidly cemented together with hot asphaltic cement There shall be used not less than 75 lbs of roofing felt and 25 gallons of asphalt cement coal tar pitch for each 100 square feet of roof surface

Base-flash the junction of the roofs with all walls and vertical surfaces, using 16 oz soft copper, carried out 4" on the waterproofing and at least 12" on the vertical surfaces. Cap-flash all flashing, using 16 oz. cold rolled copper carried down into the hub of the pipes. Cement all flashing to the waterproofing by laying two thicknesses of felt over same, coated as specified above.

Provide for all leader outlet scuppers 10 x 10 x 2" deep of 20 oz. cold rolled copper with a shoulder to receive the tile and carry same 4" out on the waterproofing and cement as specified for flashing.

## KEY TO ROUGH DRAFT—SPECIFICATION

| REVISED EDITION | M OF H EDITION |
|---|---|
| LESSON 34 | LESSON 27 |
| EXERCISE 2 | EXERCISE 2 |

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TREASURY DEPARTMENT
Sixth Auditor's Office
Washington, D. C.

March 29, 1919

Sir:

I have the honor to submit the following report of the business operations of this office during the fiscal year ending August 30, 1918:

It affords me pleasure to inform you that the work of the several branches of this Bureau is in a very satisfactory condition, and fully up to the requirements of the Department. In fact, in many important particulars, it is in a more advanced stage at this period of the year than has hitherto been the case.

This satisfactory result has been accomplished, however, only by the most systematic and unremitting efforts on the part of the officers and employees throughout the entire Bureau. The work of this office is always on the increase by reason of the growth of the postal service, while a corresponding increase of force has not been made.

The want of additional clerical force has been seriously felt in several divisions, but most severely in that branch of the office in charge of assorting and numbering the money orders and postal notes.

Respectfully submitted,

Auditor

Hon. Charles Foster
Secretary of the Treasury

## KEY TO ROUGH DRAFT

| REVISED EDITION | M OF H EDITION |
|---|---|
| LESSON 35 | LESSON 28 |
| EXERCISE 1 | EXERCISE 1 |

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Washington, D. C.
March 31, 1919

Mr. Charles Brandon
Boston, Massachusette

Dear Sir:

The entire propriety and even the necessity of an examination before appointment to Government clerkships can hardly be questioned; for, otherwise, there certainly would be an occasional appointment of a very illiterate person. Few, indeed, argue against examination. The management and the subjects of the Civil Service examination are more particularly assailed.

Whenever feasible, a special and technical examination is held. The number of applicants who have any special training in, or knowledge of, the work in the department is small. Examinations to test special fitness for every class of clerical work, therefore, would not be practical. These examinations must be general in their character and conducted to ascertain the applicant's general education and intelligence.

The Government pays its clerks the best salaries, and it is entitled to the best service. All else being equal, a common school education must be a requirement in the selection of competent clerks. The need of Civil Service reform originated in the great necessity of making all appointments free from control or interference of politicians.

With great esteem, I am

Yours truly,

SV

## KEY TO ROUGH DRAFT

REVISED EDITION
LESSON 35
EXERCISE 2

M OF H EDITION
LESSON 28
EXERCISE 2

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Messrs. Rowe & Wood
2276 Aberdeen Street
Montreal, Quebec
Canada

Mr. Francis H. DeRelle
c/o Camp Odell
Orange Lake, nr. Newburgh
New York

Massachusetts Cotton Mills
Lowell
Massachusetts

President,
Leland Stanford Jr. University,
Palo Alto, California

Mr. John Wanamaker
Broadway, Fourth Avenue
Ninth & Tenth Sts.
New York City

Mr. J. F. Spaulding, General Agent
N. Y., N. H. & H. R. R. Co.
Boston, Massachusetts

Miss M. C. Gallagher
99 Ribsbridge Road
Gidea Park, Essex County
ENGLAND

Mr. Graham Lloyd, Traffic Agent
Michigan Central Ry.
Buffalo, New York

Mr. James Guggenslooker
Atlantic Transportation Co.
328 Rialto Bldg.
Chicago, Illinois

Honolulu Iron Works Company
Honolulu
Hawaii

Sergeant John A. Morris
Military Hospital
Barrow-in-Furness
ENGLAND

Mr. J. J. Southwick
Avenida de Mayo, 1365
Buenos Aires, Argentina

Mr. Ward C. McCloskey, Principal
Central High School
Santurce, San Juan
PORTO RICO

Mr. George H. Hankinson
Hotel Metropole, New Westminster
British Columbia, Canada

S. V. Greenberg, Esq.
106 Chestnut Avenue
Forest Gate, London E. C.
ENGLAND

Mr. Louis N. Jimenez
c/o Collector General of Customs
Managua, Nicaragua, C. A.

Mr. Wm. R. Foster
Merchants Despatch Transportation Company
East Rochester, New York

## ILLUSTRATIONS OF FORMS OF ARRANGEMENT OF ADDRESSES

REVISED EDITION
LESSON 36
PAGE 96

M OF H EDITION
LESSON 29
PAGE 72

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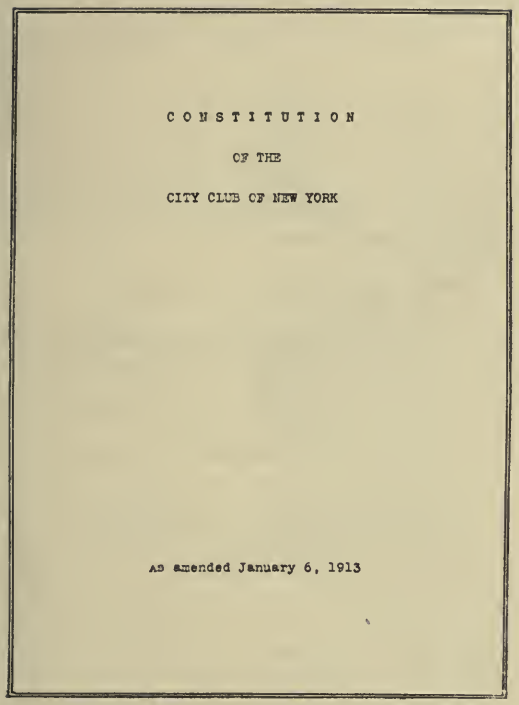


SUGGESTION FOR TITLE PAGE
REVISED EDITION
LESSON 51
PAGE 130

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CONSTITUTION

Article 1

PURPOSE OF THE CLUB

The purpose of the City Club of New York shall be to aid in securing permanent good government for the City of New York by:

1. The divorce of the city's affairs from national party politics

2. The establishment and maintenance of an efficient and responsible form of city government.

3. Honest and fair methods of nominating and electing municipal officers

4. The improvement of economic and social conditions in the city

5. Conducting discussions of the affairs and problems of the city.

6. Providing, through the facilities of a social club, means of intercourse and co-operation among citizens, officials, and organizations interested in the city's welfare

The City Club of New York pledges itself not to participate in the nomination, election, or appointment of candidates to any office, nor to conduct any political activities except such as are involved in legislation affecting the city or the adoption or rejection by the city government of measures of public policy This shall not preclude proceedings for the removal of public officers on definite charges.

No citizen of the City of New York shall be debarred from membership in the Club by reason of his party affiliations.

SUGGESTION FOR FORM OF CONSTITUTION

REVISED EDITION
LESSON 51
PAGE 130

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MERCHANT MARINE

One of the great needs of the United States is an ocean-carrying marine. In one year we paid to foreign companies $169,000,000 for freightage, and $45,000,000 for passenger fares and marine insurance. In the same year the country sent to foreign lands over $600,000,000 worth more of goods than it bought from them; and some writers call this sum the balance of trade in our favor. New York, the second largest city in the world, is the port of the regular steamship lines between Europe and the United States. It is the outlet for over one-third of our domestic exports, receiving even a larger proportion of our imports. Breadstuffs, provisions, cotton, and petroleum form about one-half of its exports. As the city has 353 miles of water front, half of which may be improved for shipping, and as the piers of Jersey City and Hoboken, in New Jersey, are practically a part of the same port, its ninety miles of pier line, already surpassing all other ports, may be largely extended. The foreign movement of the port, or the capacity of vessels in the foreign trade entering or leaving, is more than three times the tonnage of Boston, its nearest competitor. About fifty steamers in the foreign trade leave the port every week, half of which sail under the British and one-eighth under the American flag.

## KEY TO ROUGH DRAFT

REVISED EDITION
LESSON 54
PAGE 140

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THE UNIVERSAL DISTRIBUTING COMPANY
77 MADISON AVENUE
NEW YORK

ORDER NO 73815

NEW YORK MARCH 31 1913

SOLD TO MISS CELIA O BENNETT
19 CADWELL STREET
OMAHA NEBRASKA

| | | | |
|---|---|---|---|
| 1 WOMAN'S SUIT | | $65 00 | |
| 1 RIDING HABIT | | 45 00 | |
| 1 SPORT SKIRT | | 21 00 | |
| 4 BLOUSES | 10 00 | 40 00 | |
| 1 SILK SWEATER | | 26 50 | $197 50 |

## KEY TO ITEMIZED BILL

| REVISED EDITION | M OF H EDITION |
|---|---|
| LESSON 55 | LESSON 30 |
| EXERCISE 3 | EXERCISE 3 |

(*See pages 113 and 114 for totals of other bills of these lessons.*)

Univ Calif - Digitized by Microsoft

THE UNIVERSAL DISTRIBUTING COMPANY
77 MADISON AVENUE
NEW YORK

ORDER NO 3524

NEW YORK MARCH 31 1919

SOLD TO WALTERS & ANDREWS
NEW YORK CITY
NEW YORK

| | | | | |
|---|---|---|---|---|
| 1 | #20 SECTION | | $ 3 50 | |
| 1 | #2005½ REVOLVING CHAIR OAK | | 11 75 | |
| 1 | #106-60" FLAT TOP DESK OAK | | 37 50 | |
| 11 | #107½ P REVOLVING CHAIRS OAK | 8 25 | 90 75 | |
| 2 | #193-60" TYPEWRITER DESK OAK WITH ATTACHMENT IN LEFT PEDESTAL | | 87 00 | |
| 6 | #5 TYPEWRITER STANDS OAK | 13 50 | 108 00 | |
| 1 | #666-60" FLAT TOP DESK N OAK | | 37 50 | |
| 1 | #94-39"TYPEWRITER DESK OAK | | 30 75 | |
| 2 | #107½P STOOLS OAK | | 18 00 | |
| 1 | #87-8' STANDING DESK WITH CASH TILL $3 OAK | | 42 00 | |
| 1 | #44½-4' SETEE | | 12 75 | |
| 1 | #201 W SIDE CHAIR OAK | | 6 75 | |
| 1 | #107½P S & S CHAIR OAK | | 8 25 | |
| 1 | 193-60"TYPEWRITER DESK OAK | | 43 50 | |
| 1 | #107½P' REVOLVING CHAIR OAK | | 8 25 | |
| ½ | GALLON FURNITURE POLISH | | 2 50 | |
| 1 | #3003 COSTUMER OAK | | 6 50 | |
| 2 | #4 TOPS 4 #20 SECTIONS 2 #22 SECTIONS 2 #24 SECTIONS 2 #490 BASES ALL OAK | | 40 00 | |
| 1 | #2005½ S & S CHAIR OAK | | 11 75 | |
| 1 | #2005½ REVOLVING CHAIR P L SEAT OAK | | 11 75 | |
| 1 | #165 TABLE OAK | | 17 50 | |
| 1 | #700-42" TABLE | | 14 25 | |
| 2 | #700-60" TABLE OAK | 21 00 | 43 00 | |
| 1 | #700-60" TABLE OAK | | 21 00 | |
| 1 | #300½P S & S CHAIR OAK | | 14 75 | |
| 1 | #106-60"FLAT TOP DESK OAK | | 37 50 | |
| 1 | #2005½ REVOLVING CHAIRS OAK | | 11 75 | |
| 1 | #4 TOP 2 #20 SECTIONS 1 #22 SECTIONS 1 #24 SECTIONS 1 #490 BASE ALL OAK | | 20 00 | $797 50 |

## KEY TO ITEMIZED BILL

REVISED EDITION
LESSON 56
EXERCISE 2

M OF H EDITION
LESSON 31
EXERCISE 2

(*See pages 107 and 108 for totals of other exercises of these lessons.*)

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STATES AND TERRITORIES OF THE UNITED STATES

| NAME | ABBREVIATION | CAPITAL |
|---|---|---|
| Alabama | Ala. | Montgomery |
| Alaska | Alaska | Sitka |
| Arizona | Ariz. | Phoenix |
| Arkansas | Ark. | Little Rock |
| California | Cal. | Sacramento |
| Colorado | Colo. | Denver |
| Connecticut | Conn. | Hartford |
| Delaware | Del. | Dover |
| District of Columbia | D. C. | Washington |
| Florida | Fla. | Tallahassee |
| Georgia | Ga. | Atlanta |
| Guam | Guam | Guam |
| Hawaii | Hawaii | Honolulu |
| Idaho | Idaho | Boise |
| Illinois | Ill. | Springfield |
| Indiana | Ind. | Indianapolis |
| Iowa | Iowa | Des Moines |
| Kansas | Kans. | Topeka |
| Kentucky | Ky. | Frankfort |
| Louisiana | La. | Baton Rouge |
| Maine | Maine | Augusta |
| Maryland | Md. | Annapolis |
| Massachusetts | Mass. | Boston |
| Michigan | Mich. | Lansing |
| Minnesota | Minn. | St. Paul |
| Mississippi | Miss. | Jackson |
| Missouri | Mo. | Jefferson City |
| Montana | Mont. | Helena |
| Nebraska | Nebr. | Lincoln |
| Nevada | Nev. | Carson City |
| New Hampshire | N. H. | Concord |
| New Jersey | N. J. | Trenton |
| New Mexico | N. Mex. | Santa Fe |
| New York | N. Y. | Albany |
| North Carolina | N. C. | Raleigh |
| North Dakota | N. Dak. | Bismarck |
| Ohio | Ohio | Columbus |
| Oklahoma | Okla. | Oklahoma City |
| Oregon | Oreg. | Salem |
| Pennsylvania | Pa. | Harrisburg |
| Philippine Islands | P. I. | Manila |
| Porto Rico | P. R. | San Juan |
| Rhode Island | R. I. | Providence |
| Samoa | Samoa | (not given) |
| South Carolina | S. C. | Columbia |
| South Dakota | S. Dak. | Pierre |
| Tennessee | Tenn. | Nashville |
| Texas | Tex. | Austin |
| Utah | Utah | Salt Lake City |
| Vermont | Vt. | Montpelier |
| Virginia | Va. | Richmond |
| Washington | Wash. | Olympia |
| West Virginia | W. Va. | Charleston |
| Wisconsin | Wis. | Madison |
| Wyoming | Wyo. | Cheyenne |

## KEY TO TABULATION

REVISED EDITION
LESSON 59
EXERCISE 2

Univ Calif - Digitized by Microsoft

THE ROYAL BANK OF CANADA, INCORPORATED
1869
Statement to the Dominion Government, June 30, 1914

LIABILITIES

| | |
|---|---|
| Capital paid up | $11,560,000.00 |
| Reserve fund | 12,560,000.00 |
| Undivided profits | 1,015,119.58 |
| Notes in circulation | 12,124,045.09 |
| Deposits | 140,324,230.55 |
| Due to other banks | 4,335,393.36 |
| Acceptances by London Branch | 4,854,902.19 |
| Acceptances under letters of credit | 1,141,995.07 |
| | $187,915,685.84 |

ASSETS

| | |
|---|---|
| Cash on hand and in banks | $38,204,008.23 |
| Deposit in Central Gold Reserves | 1,000,000.00 |
| Government and municipal securities | 3,578,997.43 |
| Railway and other bonds, debentures and stock | 12,803,257.98 |
| Call loans on stocks and bonds | 17,997,290.72 |
| Deposit with Dominion Government for security of note circulation | 595,340.00 |
| | $74,178,894.36 |

| | |
|---|---|
| Loans and discounts | $105,944,030.04 |
| Liabilities of customers under letters of credit as per contra | 1,141,995.07 |
| Bank premises | 6,050,766.37 |
| Real estate other than bank premises | 600,000.00 |
| | $187,915,685.84 |

## FORM OF BANK STATEMENT

REVISED EDITION
LESSON 64
EXERCISE 1

M OF H EDITION
LESSON 33
EXERCISE 1

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THE GIRARD NATIONAL BANK

Joseph Wayne, Jr. President  Evan Randolph, Vice President
Charles M. Ashton, Cashier  A. W. Pickford, Ass't. Cashier
Alfred Barratt, Ass't. Cashier

Philadelphia, Pennsylvania

June 30, 1916

RESOURCES

| | |
|---|---|
| Loans and investments | $46,929,810.16 |
| Customers' liability under letters of credit | 93,618.76 |
| Customers' liability account of acceptances | 518,056.00 |
| Due from banks | 8,259,991.26 |
| Exchange for clearing house | 2,565,866.72 |
| Cash and reserve | 11,615,942.78 |
| | $69,983,285.68 |

LIABILITIES

| | |
|---|---|
| Capital | $ 2,000,000.00 |
| Surplus and profits | 4,987,545.40 |
| Circulation | 1,078,000.00 |
| Letters of credit issued to customers | 93,618.76 |
| Acceptances based on imports and exports | 518,056.00 |
| Deposits | 51,396,065.52 |
| | $69,983,285.68 |

FORM OF BANK STATEMENT

REVISED EDITION
LESSON 64
EXERCISE 2

M OF H EDITION
LESSON 33
EXERCISE 2

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FOURTH STREET NATIONAL BANK
Philadelphia, Pennsylvania

June 30, 1916

RESOURCES

| | |
|---|---|
| Loans and discounts | $40,651,841.32 |
| Customers' liability under letters of credit | 2,097,345.51 |
| Due from banks | 8,259,419.33 |
| Exchanges for clearing house | 1,348,549.17 |
| Cash and reserve | 14,562,860.83 |
| | $66,920,016.16 |

LIABILITIES

| | |
|---|---|
| Capital stock | $ 3,000,000.00 |
| Surplus and net profits | 6,660,443.73 |
| Reserved for taxes | 10,000.00 |
| Circulation | 491,500.00 |
| Letters of credit issued to customers | 2,098,828.86 |
| Deposits | 54,659,243.57 |
| | $66,920,016.16 |

R. J. Clark
Cashier

## FORM OF BANK STATEMENT

REVISED EDITION
LESSON 64
EXERCISE 3

M OF H EDITION
LESSON 33
EXERCISE 3

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MELLON NATIONAL BANK
Pittsburgh, Pennsylvania

June 30, 1916

RESOURCES

| | |
|---|---|
| Loan, bonds, and investment securities | $66,874,744.14 |
| Overdrafts | 13.01 |
| Cash | 7,696,695.17 |
| Due from banks | 17,382,722.33 |
| | $91,954,174.65 |

LIABILITIES

| | |
|---|---|
| Capital | $ 6,000,000.00 |
| Surplus and undivided profits | 3,509,602.32 |
| Reserved for depreciation etc. | 316,765.86 |
| Circulating notes | 3,417,997.50 |
| Deposits | 78,709,808.97 |
| | $91,954,174.65 |

FORM OF BANK STATEMENT

REVISED EDITION
LESSON 64
EXERCISE 4

M OF H EDITION
LESSON 33
EXERCISE 4

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THE MARINE NATIONAL BANK OF BUFFALO
Buffalo, New York

June 30, 1916

240th Statement

RESOURCES

| | |
|---|---|
| Demand loans | $ 9,594,458.15 |
| Time loans | 26,389,704.88 |
| United States Bonds | 5,101,000.00 |
| Bonds and securities | 18,505,381.98 |
| Banking house and lot | 1,500,000.00 |
| Cash on hand and with banks | 14,983,578.46 |
| | $76,074,123.47 |

LIABILITIES

| | |
|---|---|
| Capital | $ 5,000,000.00 |
| Surplus | 4,000,000.00 |
| Undivided profits | |
| (Dividend $200,000.00 paid June 30) | 471,495.62 |
| Reserve for taxes | 61,635.29 |
| Circulation | 4,987,012.50 |
| Deposits | 61,553,980.06 |
| | $76,074,123.47 |

Deposits June 30, 1916...$61,553,980.06...
Deposits June 30, 1915... 44,619,321.21...
Increase ..... $16,934,656.85

FORM OF BANK STATEMENT

REVISED EDITION
LESSON 65
EXERCISE 1

M OF H EDITION
LESSON 33
EXERCISE 5

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FIRST NATIONAL BANK
Cleveland, Ohio

Statement of Condition, June 30, 1916

RESOURCES

| | |
|---|---|
| Loans and investments | $35,046,056.19 |
| Overdrafts | 7,864.59 |
| United States Bonds | 471,000.00 |
| Bank building | 750,000.00 |
| Cash and due from banks | 19,102,657.54 |
| Commercial and travellers' letters of credit issued | 434,438.25 |
| Due from Federal Reserve Bank | 1,689,063.60 |
| | $57,611,080.57 |

LIABILITIES

| | |
|---|---|
| Capital stock | $ 2,500,000 00 |
| Surplus and profits | 2,289,911 86 |
| Circulation | 371,000 00 |
| Deposits | 51,269,730 46 |
| United States Bond Account | 471,000 00 |
| Unused letters of credit | 434,438.25 |
| Provident Reserve Fund | 100,000 00 |
| Reserve for dividend due July 1 1916 | 75,000.00 |
| | $57 611 080 57 |

FORM OF BANK STATEMENT

REVISED EDITION
LESSON 65
EXERCISE 2

M OF H EDITION
LESSON 33
EXERCISE 6

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ESSEX COUNTY NATIONAL BANK
Newark, New Jersey

June 30, 1916

RESOURCES

| | |
|---|---|
| Loans and discounts | $ 7,641,484.79 |
| Bonds and investments | 2,363,621.00 |
| Banking House | 500,000.00 |
| Cash, and due from banks | 3,714,233.94 |
| | $14,219,339.73 |

LIABILITIES

| | |
|---|---|
| Capital stock paid in | $ 1,000,000.00 |
| Surplus and profits | 1,682,560.30 |
| Circulation | 374,997.50 |
| Deposits | 11,161,781.93 |
| | $14,219,339.73 |

OFFICERS

Charles L. Farrell, President  Frank B. Adams, Vice President
Benjamin Atha, Vice President  George F. Reeve, Vice President
A. F. R. Martin, Cashier

## FORM OF BANK STATEMENT

REVISED EDITION
LESSON 65
EXERCISE 3

M OF H EDITION
LESSON 33
EXERCISE 7

Univ Calif - Digitized by Microsoft

NEW YORK STATE NATIONAL BANK
Albany, New York

June 30, 1916

RESOURCES

| | | |
|---|---|---|
| Loans and discounts | | $ 8,196,202.08 |
| Bonds and investments | | 7,604,253.19 |
| Real estate | | 271,578.65 |
| Cash and due from banks | | 6,638,162.20 |
| | | $22,710,196.12 |

LIABILITIES

| | | |
|---|---|---|
| Capital stock paid in | | $ 500,000.00 |
| Surplus and profits | | 647,712.66 |
| Circulation | | 250,000.00 |
| Deposits: | | |
| Individuals | $ 7,991,025.67 | |
| Banks | 13,321,457.79 | |
| Total | | 21,312,483.46 |
| | | $22,710,196.12 |

OFFICERS

Ledyard Cogswell, President
Ledyard Cogswell, Jr., 2d Vice President
William Bruce, Assistant Cashier
J. Townsend Lansing, Vice President
George A. White, Cashier
J. Milton Russum, Assistant Cashier
Edward R. Thorn, Assistant Cashier

FORM OF BANK STATEMENT

REVISED EDITION
LESSON 65
EXERCISE 4

M OF H EDITION
LESSON 33
EXERCISE 8

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## TOTALS ON BILLS AND STATEMENTS

### REVISED EDITION

| Lesson | Page | Exercise | Total |
|---|---|---|---|
| 55 | 149 | 1 (model) | $ 14 28 |
| | 150 | 2 | 111 75 |
| | 150 | 3 | 197 50 |
| | 150 | 4 | 279 35 |
| | 150 | 5 | 288 25 |
| | 150 | 6 | 6 46 |
| | 150 | 7 | 9 70 |
| | 150 | 8 | 105 55 |
| | 150 | 9 | 28 00 |
| | 150 | 10 | 4 15 |
| | 150 | 11 | 8 96 |
| | 150 | 12 | 7 93 |
| | 150 | 13 | 3 30 |
| 56 | 151 | 1 (model) | $ 246 73 |
| | 152 | 2 | 797 50 |
| | 152 | 3 | 244 95 |
| | 152 | 4 | 29 11 |
| | 152 | 5 | 3 65 |
| | 152 | 6 | 93 25 |
| | 152 | 7 | 120 00 |
| | 152 | 8 | 1315 50 |
| | 152 | 9 | 48 90 |
| 57 | 153 | Model | $ 618 75 |
| | 154 | 1 | 284 98 |
| | 154 | 2 | 192 30 |
| | 154 | 3 | 185 63 |
| | 154 | 4 | 10 00 |
| | 154 | 5 | 32 50 |
| | 154 | 6 | 60 00 |
| | 154 | 7 | 60 00 |
| | 154 | 8 | 209 50 |
| | 154 | 9 | 23 15 |
| | 154 | 10 | 1 85 |
| | 154 | 11 | 60 00 |
| | 154 | 12 | 42 85 |

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| Lesson | Page | Exercise | Total |
|---|---|---|---|
| 58 | 155 | 1 (model) | $ 70 50 |
| | 156 | 2 (model) | 27 25 |
| | 157 | 3 | 150 25 |
| | 157 | 4 | 9 31 |
| | 157 | 5 | 16 50 |
| | 157 | 6 | 64 |
| | 157 | 7 | 70 97 |
| | 157 | 8 | 55 25 |
| | 157 | 9 | 21 50 |
| | 157 | 10 | 975 00 |
| | 157 | 11 | 38 25 |
| | 157 | 12 | 956 00 |
| | 157 | 13 | 1638 98 |
| | 157 | 14 | 225 00 |
| | 157 | 15 | 289 98 |
| | 157 | 16 | 34 00 |

## MEDAL OF HONOR EDITION

| | | | |
|---|---|---|---|
| 30 | 77 | 1 (model) | $ 14 28 |
| | 78 | 2 | 111 75 |
| | 78 | 3 | 197 50 |
| | 78 | 4 | 279 35 |
| | 78 | 5 | 288 25 |
| | 78 | 6 | 6 46 |
| | 78 | 7 | 9 70 |
| | 78 | 8 | 105 55 |
| | 78 | 9 | 28 00 |
| | 78 | 10 | 4 15 |
| | 78 | 11 | 8 96 |
| | 78 | 12 | 7 93 |
| | 78 | 13 | 3 30 |
| 31 | 79 | 1 (model) | $ 246 73 |
| | 80 | 2 | 797 50 |
| | 80 | 3 | 244 95 |
| | 80 | 4 | 29 11 |
| | 80 | 5 | 3 65 |
| | 80 | 6 | 93 25 |
| | 80 | 7 | 120 00 |
| | 80 | 8 | 1315 50 |
| | 80 | 9 | 48 90 |

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## DETAILED SUGGESTIONS FOR HANDLING THE MEDAL OF HONOR EDITION

The Medal of Honor Edition of Rational Typewriting is designed to meet the requirements of a short, intensive course in either high schools or business schools. As outlined in the following, 120 periods of forty-five minutes each are required, divided as follows:

Sixty periods devoted to the finger board technique;
Twenty periods devoted to the "Speed Studies";
Forty periods devoted to the business correspondence, business papers, billing, tabulation, etc.

In private business schools, where two periods a day—and generally longer periods—are devoted to the subject, the work can be completed according to the outline in twelve weeks.

In high schools, where generally but one period a day is devoted to the work, twenty-four weeks will be required. In night schools, whose students are generally older and possess better judgment, or where an even briefer course is required, the Medal of Honor Edition will be found remarkably flexible. By reducing the amount of work on the first twelve lessons to one line of practice instead of two on each word, the time may be cut to forty periods, without impairing, in most cases, the thoroughness of the work.

It is not recommended that the time on the "Speed Studies" be reduced beyond the point suggested in the outline (four weeks); but, in the remaining lessons, many of the exercises can be eliminated if a particularly short course is found desirable. The experienced teacher will be able to

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make such adjustments of material to time as are necessary, but the author will be glad to correspond with teachers and to give advice in the rearrangement of the schedule.

The outline submitted, it should be remembered, is one that will meet ordinary conditions, and is not intended to be final. The teacher will be able to adapt the outline to varying conditions, especially with regard to the "reviews," "quizzes," "examinations" and so on.

In order to avoid the duplication of "keys" for the constructive exercises presented, the teacher is referred to the "keys" for the Revised Edition, which contains references to both the Revised and Medal of Honor Editions.

### LESSONS ONE TO TWELVE (Inclusive)

The plan of the first twelve lessons in the Medal of Honor Edition is exactly the same as the first twelve lessons of the Revised Edition. The teacher is therefore referred to the outline for the Revised Edition for the details of handling these lessons. Sixty periods of forty-five minutes each are required to complete this work.

### LESSONS THIRTEEN TO SEVENTEEN (Inclusive)
(20 periods)

**Speed Studies:** For detailed suggestions for handling see the same subject under the outline for the Revised Edition. Twenty periods of forty-five minutes each are required for this work.

**Introduction to Business Correspondence:** The teacher should not only make a thorough study of the introduction, but should see that his students understand the fundamentals of the subject. This can be brought about by a full discussion of the subject and blackboard illustrations. The subjects of tabulation and Remington Self-starter are discussed in the outline for the Revised Edition.

**EIGHTEENTH LESSON** (Two periods)

Require one copy each of Model I and the five construction exercises.

**NINETEENTH LESSON** (Two periods)

On this and Lessons 20–25 inclusive follow the same plan as outlined for the eighteenth lesson.

**TWENTIETH LESSON** (Two periods)

**TWENTY-FIRST LESSON** (Two periods)

**TWENTY-SECOND LESSON** (Two periods)

**TWENTY-THIRD LESSON** (Two periods)

**TWENTY-FOURTH LESSON** (Two periods

**TWENTY-FIFTH LESSON** (Two periods)

**TWENTY-SIXTH LESSON** (Two periods)

See the thirty-second lesson in the Revised Edition outline for discussion and method of handling.

**TWENTY-SEVENTH LESSON** (Two periods)

See the thirty-fourth lesson in the Revised Edition outline for a discussion of the subject of "Rough Draft."

**TWENTY-EIGHTH LESSON** (Two periods)

**TWENTY-NINTH LESSON** (Two periods)

See discussion of "Directing Envelopes" in the thirty-sixth lesson of the Revised Edition outline.

**THIRTIETH LESSON** (Two periods)

See "Introduction to Tabulation and Billing" preceding the fifty-fifth lesson in the Revised Edition outline.

**THIRTY-FIRST LESSON** (Three periods)

**THIRTY-SECOND LESSON** (Two periods)

**THIRTY-THIRD LESSON** (Two periods)

**THIRTY-FOURTH LESSON** (Two periods)

See discussion of manuscripts, business and law papers, Lessons 46 and 67 in the outline for the Revised Edition.

**THIRTY-FIFTH LESSON** (Two periods)

**THIRTY-SIXTH LESSON** (Two periods)

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## DETAILED OUTLINE OF A COURSE IN RATIONAL TYPEWRITING—150 PERIODS OF 45 MINUTES EACH

### MEDAL OF HONOR EDITION

(This course, which was outlined for the rehabilitation work of the Federal Board for Vocational Education, is designed to give the student a commercial working knowledge of typewriting.)

### SUGGESTED COURSES

In arranging the course the following points were given consideration:

**Scope:** Five Units.

**First Unit:** Mastery of the keyboard and a working familiarity with the various parts of the machine, sufficient to qualify the operator to write simple letters, make carbon copies, and direct envelopes.

Estimated time required: Two forty-five-minute periods a day for thirty days.

**Second Unit:** Speed drills. Practice from simple printed matter until a speed of at least 125 strokes a minute is attained with a margin of error of one stroke.

No estimate as to time required. Personal equation varies.

**Third Unit:** Practice on various letter forms, addressing envelopes, and copying simple literary articles.

Time required: Two forty-five-minute periods for ten days.

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**Fourth Unit:** Practice on business and legal documents.

Time required: Two forty-five-minute periods for ten days.

**Fifth Unit:** Tabulating and Rough Draft.

Time required: Two forty-five-minute periods for ten days.

Note: It is recommended that while the learners are engaged on units 3, 4, and 5, ten minutes each period be devoted to copying simple printed matter.

## OUTLINE OF COURSE

**First Unit:** 60 periods of 45 minutes each.

(Mastery of the keyboard, and a working familiarity with the various parts of the machine; simple letters; carbon copies; directing envelopes.)

**First Period**

(a) Explanation of machine and necessary working parts mentioned on page 5

(b) Explanation of keyboard using charts on page 4, and the machine itself for further illustration

(c) Position at machine, pages 5, 6

(d) Touch and fingering, page 6

(e) How to begin, pages 6, 7

(f) Explanation of finger divisions in a general way, with special reference to the central division

(g) Preliminary practice in acquiring touch (Striking keys)

**Second Period**

(a) Review previous period's work

(b) Drill on memorizing central division

(c) Writing first exercise, page 8

**Third Period**

(a) Review on location of keys

(b) Drills on striking different keys

(c) Second exercise, page 8

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**Fourth Period**
(a) Drills in locating keys
(b) Rhythm drills
(c) Words of high frequency, page 7
(d) Third exercise, page 8

**Fifth Period**
(a) Explanation of second finger division
(b) Memorizing new keys
(c) Preliminary drills in locating keys
(d) First exercise, page 10

**Sixth Period**
(a) Location and rhythm drills
(b) Second exercise, page 10

**Seventh Period**
(a) Features of machine, page 9
(b) Third exercise, page 10

**Eighth Period**
(a) High frequency words, page 9
(b) Supplementary exercise, page 9

**Ninth Period**
(a) Explanation of third finger division
(b) Preliminary drill on third finger keys
(c) First exercise, page 12

**Tenth Period**
(a) Location and rhythm drills
(b) Second exercise, page 12
(c) Words of high frequency, page 11

**Eleventh Period**
(a) Features of machine, page 11
(b) Third exercise, page 12
(c) Special third finger exercise, page 11, writing one line of each word only

**Twelfth Period**
(a) Instruction and preliminary exercise, page 13
(b) First exercise, page 14

**Thirteenth Period**
(a) Location and rhythm drills
(b) Second exercise, page 14
(c) High frequency words, page 13

**Fourteenth Period**
(a) Features of machine, page 13
(b) Third exercise, page 14
(c) Supplementary exercise, page 13, one line of each word only

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| | |
|---|---|
| **Fifteenth Period** | (a) Instructions and suggestions, page 15<br>(b) Capital letters, page 15<br>(c) First exercise, page 16 |
| **Sixteenth Period** | (a) Rhythm drills<br>(b) Words of high frequency, page 15<br>(c) Second exercise, page 16 |
| **Seventeenth Period** | (a) Features of machine, page 15<br>(b) Third exercise, page 16<br>(c) Supplementary exercise, page 15, one line of each word only |
| **Eighteenth Period** | (a) Instructions and suggestions, page 17<br>(b) First exercise, page 18<br>(c) Words of high frequency page 17 |
| **Nineteenth Period** | (a) Supplementary exercise, page 17<br>(b) Second exercise, page 18 |
| **Twentieth Period** | (a) Parts of machine, page 17<br>(b) Third exercise, page 18 |
| **Twenty-first Period** | (a) Study Instructions and suggestions, page 19<br>(b) First exercise, page 20 |
| **Twenty-second Period** | Second exercise, page 20 |
| **Twenty-third Period** | (a) Location and rhythm drills<br>(b) Third exercise, first two sentences, page 20 |

(NOTE: Beginning with this exercise, an effort should be made to increase speed. Each of the sentences should be written at least ten times. The exercise can be completed in the forty-five-minute period if the student can average 10 words a minute. The first group of figures in the parenthesis indicates the number of words in the sentence; the figures following the hyphen, the average number of strokes in a word. The sentences may be used for speed drills. It would be well for the student to practice each of the long words in each sentence a few times before writing the complete sentence.)

(c) Assign for study "Numerals," page 19. The class group should be questioned on this at the next recitation

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| | |
|---|---|
| Twenty-fourth Period | (a) Quiz on "Numerals," page 19<br>(b) Words of high frequency, page 19<br>(c) Third exercise, third sentence, page 20 |
| Twenty-fifth Period | (a) Study Eighth Lesson, page 21<br>(b) First exercise, page 22 |
| Twenty-sixth Period | (a) Words of high frequency, page 21<br>(b) Dictation drills on words of high frequency, page 21 |
| Twenty-seventh Period | (a) Second exercise, page 22. Repeat as many times as the time permits<br>(b) Study "Numerals," page 21 |
| Twenty-eighth Period | (a) Quiz on "Numerals," page 21<br>(b) Speed drills on third exercise, page 22 |
| Twenty-ninth Period | (a) Instructions and suggestions, page 23<br>(b) Words of high frequency, page 23 |
| Thirtieth Period | (a) Dictation drills on words of high frequency, page 23<br>(b) First exercise, page 24 |
| Thirty-first Period | (a) Second exercise, page 24<br>(b) Study of "Spacing after Punctuation Marks," page 23 |
| Thirty-second Period | (a) Quiz on "Spacing after Punctuation Marks," page 23<br>(b) Speed drills on third exercise, page 24 |
| Thirty-third Period | (a) Instructions and suggestions, page 25<br>(b) Words of high frequency, page 25 |
| Thirty-fourth Period | (a) Dictation drills on words of high frequency, page 25<br>(b) First exercise, page 26 |
| Thirty-fifth Period | Second exercise, page 26 |
| Thirty-sixth Period | Third exercise, page 26 |
| Thirty-seventh Period | (a) Study "Things You Ought to Know," page 25<br>(b) Speed drills on fourth exercise, page 26 |
| Thirty-eighth Period | (a) Instructions and suggestions, page 27<br>(b) Words of high frequency, page 27 |

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| | | |
|---|---|---|
| **Thirty-ninth Period** | | First exercise, page 28 |
| **Fortieth Period** | (a) | Dictation drills on words of high frequency, page 27 |
| | (b) | Second exercise, page 28 |
| **Forty-first Period** | | Third exercise, page 28 |
| **Forty-second Period** | (a) | Study "Things You Ought to Know," page 27 |
| | (b) | Speed drills on fourth exercise, page 28 |
| **Forty-third Period** | (a) | Instructions, page 29 |
| | (b) | First section, words of high frequency, page 29 |
| **Forty-fourth Period** | | First exercise, page 30 |
| **Forty-fifth Period** | | Second exercise, page 30 |
| **Forty-sixth Period** | | Third exercise, page 30 |
| **Forty-seventh Period** | (a) | Second section, words of high frequency, page 29 |
| | (b) | Fourth exercise, page 30 |
| **Forty-eighth Period** | | One correct copy of "Spacing after Punctuation Marks," page 23 |
| **Forty-ninth Period** | | One copy of "Things You Ought to Know," page 25 |
| **Fiftieth Period** | (a) | Copy the following from "Things You Ought to Know," page 27, paragraphs 1, 2, 7, 8, 10 |
| | (b) | Make copy of "Things You Ought to Know," page 29 |
| **Fifty-first Period** | (a) | Study "Introduction to Business Correspondence," page 41 |
| | (b) | Study and make one correct copy of letter on page 45 |
| **Fifty-second Period** | (a) | Study "Folding Letters," page 42 |
| | (b) | Using Style Study I, page 45, as a model, copy letters given in first and second exercises, page 46 |
| | | Repeat, if necessary, until well arranged, correct copies are produced |

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| | |
|---|---|
| Fifty-third Period | (a) Study Self-starter and Tabulator keys, and uses, pages 42, 43 |
| | (b) Using Style Study I as a guide, rearrange exercises three, four, and five, page 46 |
| Fifty-fourth Period | (a) Study "Manifolding," page 43 |
| | (b) Study Style Study II, page 47, and make one copy. Make one carbon copy |
| Fifty-fifth Period | Using Style Study II as a guide, rearrange exercises one and two, page 48. Make one carbon of each |
| Fifty-sixth Period | Prepare exercises three and four, page 48, in accordance with instructions for Fifty-fifth period |
| Fifty-seventh Period | (a) The teacher will instruct the class group as to the proper form for a personal letter |
| | (b) Write a personal letter of your own composition to a friend |
| Fifty-eighth Period | (a) Study "Directing Envelopes," pages 70, 71 |
| | (b) Direct envelopes according to addresses given, page 72 |
| Fifty-ninth Period | (a) Study "Illustration of the Finished Letter," page 63 |
| | (b) Write a personal letter, making one carbon copy |

**Second Unit:** Speed Drills. Practice from simple matter until a speed of at least 125 strokes a minute is attained, with a margin of error of one stroke.

Time: Indefinite, as the personal equation varies. (Note: Probably a majority of the students who intelligently have gone over the part of the textbook outlined in the foregoing, will have acquired a speed approximating the standard established. The following speed drills will be valuable chiefly in greatly increasing that speed.)

**Outline of Program:** The student should make a study of the points covered in "Introduction to Speed Studies," beginning page 31. This will prepare the student for

the problem before him. The work for speed drills is presented fully in Lessons 13-17 inclusive, of Rational Typewriting, Medal of Honor Edition.

**Method of Handling the Speed Studies:** Beginning with the first exercise on page 34, the work should be assigned for practice, and the exercise repeated until the indicated speed is reached.

On this section the teacher will have an opportunity to put into operation the competitive speed drills mentioned in the Teachers' Manual.

Thirty to forty periods profitably can be put on this section of Rational Typewriting. The value of emphasis on this part of the technique of typewriting is not altogether appreciated by teachers. The object of introducing the "Speed Studies" at this time is to develop a smooth, flowing style of operation of the keyboard—to transfer this operation, in fact, to the reflex—before the student's attention is diverted to the matter of arrangement of business letters and various documents. The tendency, when the student reaches letters and matter requiring judgment in arrangement, is to slow down. If he has already acquired automatism—or approximate automatism—in operating the keyboard, the problem of arrangement is greatly simplified.

**Third Unit:** Practice on various letter forms, addressing envelopes, and copying simple literary articles.

Time required: Two forty-five-minute periods for ten days—20 periods.

OUTLINE

**First Period**
(a) Review the "Introduction to Business Correspondence," page 41
(b) Copy Style Study II, page 47
(c) First and second exercises, page 48

**Second Period** Third and fourth exercises, page 48

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| | |
|---|---|
| **Third Period** | (a) Style Study III, page 49 |
| | (b) First exercise, page 50 |
| **Fourth Period** | Second and Third exercises, page 50 |
| **Fifth Period** | Style Study IV, page 51 |
| **Sixth Period** | First and second exercises, page 52 |
| **Seventh Period** | Style Study V, page 53 |
| **Eighth Period** | First, second, third, and fourth exercises, page 54 |
| **Ninth Period** | (a) Style Study VI, page 55 |
| | (b) First exercise, page 56 |
| **Tenth Period** | Second and third exercises, page 56 |
| **Eleventh Period** | (a) Style Study VII, page 57 |
| | (b) Second exercise, page 58 |
| **Twelfth Period** | First and third exercises, page 58 |
| **Thirteenth Period** | Style Study VIII, pages 59, 60 |
| **Fourteenth Period** | First exercise, page 61 |
| **Fifteenth Period** | Second exercise, page 61 |
| **Sixteenth Period** | Third exercise, page 62 |
| **Seventeenth Period** | Telegraphic Messages, pages 64, 65 |
| **Eighteenth Period** | (a) Review "Folding Letters," "Postal Cards," page 42 |
| | (b) Original letters |
| **Nineteenth Period** | (a) Review "Tabulator" and "Self-starter," page 42 |
| | (b) Review "Directing Envelopes," pages 70, 71 |
| | (c) Direct envelopes, page 72 |
| **Twentieth Period** | (a) Study "Characters Not on the Keyboard," page 72 |
| | (b) Write the following letters, making one carbon of each; prepare envelope, get them signed by the teacher; fold properly, ready for mailing: pages 47, 49, 51 |

**Fourth Unit:** Practice on business and legal documents.

Time: Two forty-five-minute periods for ten days—20 periods.

OUTLINE

(NOTE: In order to avoid the slowing up of speed on this kind of matter, it is recommended that alternate periods be devoted to speed work.

Magazine articles or any suitable material may be used. "Shorthand Dictation Drills" contains specially selected material for this purpose. It is printed in large type to make copying easy.)

| | | | | |
|---|---|---|---|---|
| First Period | (a) | Study pages 85, 86 | Eleventh Period | Page 92 |
| | (b) | Copy page 87 | Twelfth Period | Speed drills |
| Second Period | | Speed drills | Thirteenth Period | Page 93 |
| Third Period | | Page 88 | Fourteenth Period | Speed drills |
| Fourth Period | | Speed drills | Fifteenth Period | Page 94 |
| Fifth Period | | Page 89 | Sixteenth Period | Speed drills |
| Sixth Period | | Speed drills | Seventeenth Period | Pages 95, 96 |
| Seventh Period | | Page 90 | Eighteenth Period | Speed drills |
| Eighth Period | | Speed drills | Nineteenth Period | Speed drills |
| Ninth Period | | Page 91 | Twentieth Period | Speed drills |
| Tenth Period | | Speed drills | | |

**Fifth Unit:** Time: Two forty-five-minute periods for 10 days—20 periods.

### TABULATING AND ROUGH DRAFT

### OUTLINE

| | | |
|---|---|---|
| First Period | | Page 66 |
| Second Period | | Page 67 |
| Third Period | | Page 68 |
| Fourth Period | | Page 69 |
| Fifth Period | (a) | Study and discuss pages 73, 74, 75 |
| | (b) | Copy illustration No. 3, page 74 |
| Sixth Period | | First exercise, pages 81, 82 |
| Seventh Period | (a) | Second exercise, page 82 |
| | (b) | First exercise, page 83 |
| Eighth Period | | Second, third, and fourth exercises, page 83 |
| Ninth Period | | Fifth and sixth exercises, page 84 |
| Tenth Period | | Seventh and eighth exercises, page 84. |
| Eleventh Period | (a) | Study "Tabulation Studies," "Bills and Statements," "Methods of Billing," page 76 |
| | (b) | Copy page 77 |

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| | | |
|---|---|---|
| Twelfth Period | | Exercises 2, 3, page 78 |
| Thirteenth Period | | Exercises 4, 5, page 78 |
| Fourteenth Period | | Exercises 6, 7, page 78 |
| Fifteenth Period | | Exercises 8, 9, 10, page 78 |
| Sixteenth Period | | Exercises 11, 12, 13, page 78 |
| Seventeenth Period | (a) | Page 79 |
| | (b) | Exercise 9, page 80 |
| Eighteenth Period | | Exercises 6, 7, 8, page 80 |
| Nineteenth Period | | Exercises 3, 4, 5, page 80 |
| Twentieth Period | | Exercise 2, page 80 |

(NOTE: 10 minutes of each of the periods to be devoted to "Speed Drills.")

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# OUTLINE FOR A TWENTY-FOUR WEEKS' COURSE RATIONAL TYPEWRITING METHOD

## SINGLE KEYBOARD EDITION

One period daily of forty-five minutes

1. The first twelve lessons are intended to give a thorough command of the keyboard.

2. The next six lessons cover the subject of business correspondence, furnishing an ample drill in forms and arrangements and also giving the practice necessary for developing speed.

3. The next six lessons deal with law forms and can be assigned at the discretion of the teacher.

4. The next six lessons deal with tabulation. This should be made compulsory.

**First Week:**

(a) An explanation of the typewriter—its various parts, with illustrations and demonstrations.

(b) The writing position at the machine with a demonstration of the proper posture of the body; the correct position of the hands and arms (see illustrations 1 and 2 on page 11).

Practice on the following features:

Inserting and removing the paper
Spacing and beginning a new line
Releasing the carriage
Operating the space bar
The importance of the guide keys

Particular attention should be paid to an explanation of the way the matter is arranged on the page. In the first lessons, half sheets should be used instead of full size.



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(c) An explanation of the "touch" with demonstrations. A demonstration of the proper finger action (see illustrations 3 and 4, page 12).

(d) An explanation of the keyboard charts and how they are to be used by the student. Drill on memorizing. Practice in making the various reaches.

(e) "How to Begin," as explained on page 13.

(f) Practice on the regular exercises of the lesson, page 14. Five copies of each exercise.

(g) Practice the fingering exercises for Lesson One given on page 101; two lines of each combination.

(h) The following sentences may be introduced:

Buy my rug. Try my gun. Burn my furry muff. Try my hymn. Hu hurt my thumb. Bury my ruby rug. Hunt my gum.

In practicing the sentences capitals and punctuation may be omitted.

**Second Week:**

(a) Review drill on the first keyboard division in order that the student may be sure he knows the exact location of each letter.

(b) New features of machine to be learned (see page 15).

(NOTE: If the periods are short, this lesson may be divided up into as many sections as are necessary.)

(c) An explanation of the new section of the keyboard to be learned. Practice on memorizing. Practice on making the reaches.

(d) Practice on Exercises 1 and 2, page 16—five copies.

(e) Reviews on touch and the features of the machine learned in Lesson One.

(f) Practice on the words given in the supplementary exercise—two lines of each word.

**Third Week:**

(a) Review first and second finger keyboard sections of Lessons One and Two.

(b) New features of machine (page 17), and review features learned in previous lessons.

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(c) Memorizing of the new section of the keyboard (see exercise on page 17—two lines of each word; half sheets to be used; one column will fill a half-page).

(d) Practice in making the reaches to the new keys.

(e) Practice on the regular exercises of the lesson; each exercise to be written five times; half sheets to be used.

(f) Special practice on third finger exercise (page 17); arrange and practice as outlined for supplementary exercise in Lesson Two.

(g) Practice on Supplementary Exercise (page 17).

**Fourth Week:**

(a) New features of machine to be learned (page 19); and review parts learned in previous lessons.

(b) Memorize the new section of the keyboard.

(c) Explanation and illustration of proper method of keeping first finger touching the keys "f" and "j" while operating the fourth finger keys.

(Demonstrate.)

(d) Practice on Exercises 1 and 2, page 20; five copies of each exercise; use half sheets.

(e) Practice on the supplementary exercises as outlined in previous lessons.

(f) Practice the fourth lesson fingering exercise on page 102.

**Fifth Week:**

(a) New features of machine to be learned (page 21) with a thorough review of previous features.

(b) Explanation and demonstration of method of making capital letters. Practice in striking various capitals as outlined on page 21.

(c) Practice on Exercises 1 and 2, page 22; five copies of each on half sheets.

(d) Practice on Supplementary Exercises, page 21, as outlined in the book.

(e) Practice the fingering exercise on page 102.

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**Sixth Week:**

(a) Practice on new features of machine to be learned.

(b) Practice on characters not on the keyboard.

(c) Drill on making reaches to various letters.

(d) Practice on Exercises 1 and 2, page 24; five copies of each on half sheets.

(e) Practice on Supplementary Exercise, page 23, as previously outlined.

(NOTE: It will be necessary to review thoroughly "a" and "b" later in the course.)

(f) Practice the fingering exercise given on page 103.

(g) Make up a budget of the first six lessons. (See page 9 for instructions.)

**Seventh Week:**

(a) Explanation of new method of preparing the lessons. (See instructions on page 25.) Full sheets are now to be employed.

(b) Assign for study "Numerals." A quiz should be given in this at the next lesson.

(c) Practice on Exercises 1, 2, and 3, page 26.

(d) A copy of "Numerals," page 25, should be assigned.

(e) Practice fingering drills given on page 103.

**Eighth Week:**

Follow the outline given for the seventh week, using the material in the eighth lesson, page 28.

Practice fingering drills given on page 104.

**Ninth Week:**

(a) Memorizing upper bank of keys.

(b) Practice on Exercises 1, 2, and 3, page 30, as outlined for seventh lesson.

(c) Drill on "Numerals," page 27

(d) Assign for study "Spacing after Punctuation Marks," page 29.

(e) Make one copy of "Spacing after Punctuation Marks," page 29.

(f) Practice on fingering drills given on page 104.

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**Tenth Week:**

(a) Memorize new characters on upper bank of keys.

(b) Practice Exercises 1, 2, and 3, page 32, as outlined in Lesson Seven.

(c) One copy of "Things You Ought to Know," page 31. A quiz on this should be given in the following lesson.

(d) Practice on fingering exercises given on page 104.

**Eleventh Week:**

(a) Explanation of method of preparing the lesson.

(b) Drill on Exercises 1 and 2, page 34; five copies of each exercise.

(c) One copy of "Things You Ought to Know," page 33. Drill on this exercise should be given in the following lesson.

(d) Make up a budget of the second six lessons. (See page 9 "Budgets.")

**Twelfth Week:**

Follow the same plan as outlined for the eleventh week, using the material of the twelfth lesson.

**Thirteenth and Fourteenth Weeks:** By the time the student has reached this point his operation of the keyboard should be fairly automatic, but he will not be able to write at a rapid speed. It is desirable to introduce some continuous matter for repetition practice beginning with short paragraphs and finally working into long articles. The material for this purpose can be obtained from "Shorthand Dictation Drills" using some of the first letters or short articles which have already been gone over in the shorthand work.

The teacher can also utilize much of the material presented in "Speed Studies" of either the Revised Edition or the Medal of Honor Edition of Rational Typewriting. The object of this practice is to give the student a good working speed before he encounters the work of business correspondence. When the work on business correspondence is begun the student's attention will be focused on features of arrangement and there will be a noticeable slowing up in speed if work of the character outlined above is not introduced here. In other words, the student should not be allowed to take up the problem of arrangement until the operation of the keyboard has been transferred to the reflex; it should not be necessary for him to give any conscious attention to the fingering of words, the location of keys, or any of the details of actual writing. If he has not reached this facility in operation, he should be sent back over finger board practice until he has acquired it.

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**Fifteenth Week:**

(a) A study of the various parts of a business letter.
(b) A study of "How to Arrange a Business Letter Artistically"—pages 38, 39, 40.
(c) Exercises 1 and 2, page 41; five copies of each.
(d) Some copies of "How to Arrange a Business Letter Artistically."

**Sixteenth Week:**

(a) A study of the directions for preparing the fourteenth lesson—page 42.
(b) Exercises 1, 2, 3, 4, 5, 6, 7, pages 43–51.
(c) A study of manifolding.
The mimeograph.
Folding letters (with demonstration).
Copies of each of the following articles: "Suggestions for the Typist"; "Making Enclosures"; "Corrections and Erasures"; "Postal Cards"; "Manifolding"; "The Mimeograph"; "Folding Letters."

**Seventeenth Week:**

(The lessons in Rational Typewriting from the fifteenth lesson on are designed for a more comprehensive course. The following outline for lessons 15 to 24, inclusive, should therefore be substituted in a 24-week course.)

(a) Constructive work to develop the student's knowledge of form and arrangement and to give him additional typing speed on business correspondence. The material given in assignments Nos. 2 and 3 of "Office Training for Stenographers" is especially adapted to such an exercise. This can be supplemented by other letters which the teacher can previously prepare. These letters may, if desired, be taken from "Gregg Speed Studies" previously studied in the shorthand class. They should be written on a duplicating machine so that each student can be furnished with a copy, or the students may prepare their own copies, transcribing from the shorthand notes. In preparing the exercise the matter should be written straight along without any attempt at arrangement or paragraphing. This should be left to the student. After the exercises have been prepared and inspected, such exercises as have not been arranged in accordance with the principles laid down in "How to Arrange a Business Letter Artistically," should be returned to the student with criticism and new copies be required. The preparation of these letters will afford a valuable drill to the

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advanced students. The teacher may use with advantage some of the material of the Revised Edition of Rational Typewriting for this purpose.

As many exercises as the time will permit should be provided for the fifteenth lesson.

**Eighteenth Week:**

(a) A study of directing envelopes; study illustrations on page 53.

(b) Working out the first exercise which consists of directing twenty-five envelopes from the addresses given in the book.

(c) A study of the finished letter described on page 54 and illustrated on page 55. All of the letters previously written should then have envelopes addressed and the letters prepared for the dictator's desk by arranging them as shown on page 55.

(d) Third exercise: The students should be given an oral examination to ascertain their knowledge of this subject. Exercises should be provided for writing telegrams and blanks furnished. For material for this exercise see "Office Training for Stenographers," pages 151 and 152.

(e) A study of the best methods of transcribing (see page 8 "Suggestions for Handling Office Training for Stenographers").

(f) Transcribing letters from shorthand notes. This matter at first may be put on the blackboard by the teacher. This practice will tend to keep the students' eyes fixed on the blackboard.

**Nineteenth Week:**

(a) A study of the method of preparing this lesson, page 58.

(b) Prepare Exercises 1 and 2, page 59.

(c) A study of "Rough Draft," page 58.

(d) Prepare exercises 3, 4, and 5, pages 60, 61, 62.

(e) Transcripts from shorthand plates in "Gregg Speed Studies" or work on the board written by the teacher.

**Twentieth Week:**

(a) Study "Centering," page 58 of Rational Typewriting. The exercises should be provided for practice on centering. This should be composed of titles of books with subtitles (see page 625, July, 1912, *Gregg Writer*), titles of various business papers, wills, speci-

fications, contracts, etc. (see section 10 "Office Training for Stenographers"). See also exercises on pages 84 and 85 of Rational Typewriting.

(b) Transcribing from shorthand notes, as in the foregoing.

**Twenty-first Week:**

This is a "speed" lesson, pure and simple. The object is to regain speed in straightaway copying.

(a) Provide a number of general magazine articles to be written for the purpose of gaining speed in copying from straight matter. Many of the articles given in "Shorthand Dictation Drills" (the Gregg Publishing Company) or "Speed Studies" from the Revised Edition of Rational Typewriting will afford excellent practice of this kind. These may be prepared on the mimeograph by the students in the advanced department, and will furnish splendid practice in the use of this machine.

An introduction to the work of this lesson might be made up of the exercises on "Paragraph Writing" given in the Typists' Department of the *Gregg Writer*. It should be supplemented by plenty of practice. The aim of this work is to accelerate speed in writing. The necessity for accuracy should be kept constantly in mind. Speed contests may be organized to awaken interest in the subject. At first practiced matter should be used, and then new matter, as above outlined.

A useful exercise that may be followed by teachers at this stage, is to dictate direct to the machine, writing the matter dictated on the board at the same time in shorthand. This focuses the eyes of the students on the board and gets them into the habit of reading shorthand and typing at the same time.

(b) Transcripts from students' own shorthand notes.

**Twenty-second Week:**

(a) Study the directions for seventeenth lesson in Rational Typewriting, pages 63, 64, and 65.

(b) Make one copy of following documents and prepare suitable manuscript covers for each:

1. Form of contract—page 66.
2. Form of will—page 67.
3. Form of Power of Attorney—page 68.
4. Notice of Shareholders' Meeting—page 68.

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5. Warranty Deed—page 69.
6. Form of Mortgage—page 70.
7. Bill of Sale—page 72.
8. Lease—page 76.
9. Affidavit—page 77.
10. Motion for a New Trial—page 73.

(c) Transcripts from shorthand notes.

**Twenty-third Week:**

(a) A study of the use of the Remington column finders and Underwood tabulator, with exercises (use third exercise, page 92, and first exercise, page 93).

(b) Write up the two exercises on page 94 of Rational Typewriting.

(c) Transcripts from shorthand notes.

**Twenty-fourth Week:**

(a) Write first exercise on page 97.
(b) Write first exercise on page 99.
(c) Write second exercise on page 100.
(d) Transcripts from shorthand notes.

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## DETAILED SUGGESTIONS FOR HANDLING THE SINGLE KEYBOARD EDITION

### FIRST LESSON

**First Period**

The first period should begin by a general explanation of the typewriter, its method of operation and the mechanical features which are necessary to know at the start. The outline will give the steps in their proper order.

(a) The position at the machine.

(b) Method of inserting and removing paper.

(c) Spacing for a new line and returning carriage.

(d) Releasing the carriage.

(e) The position of hands and arms.

(f) General explanation of the keyboard (see charts, page 10).

(g) Method of striking the keys.

(h) The central division of the keyboard.

(i) How to begin (page 13).

(j) Enough preliminary work on the central division to satisfy the student's desire to *write something*, as he would feel that he had made no progress unless he had done this.

**Second Period**

(a) Review of previous lesson. Drill on the central division—making the reaches, due time being given to the general method of operating and the proper touch.

(b) Assign the first exercise for practice under the direction of the teacher.

**Third Period**

(a) Drill on locating keys in central division. The exercises on page 101 may be used at the discretion of the teacher, in which case another period will be required.

(b) Drill on writing such sentences as the following, omitting capitals and periods, filling up one line of each sentence:

1. Try my gun.
2. Buy my ruby rug.
3. Try my hymn.
4. Hugh burnt my fur muff.
5. Hunt my funny jug.
6. Thy untruth hurt.
7. Hug truth but bury untruth.
8. Hu burnt my mummy.

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(c) Assign second exercise to be written under the supervision of the teacher.

**Fourth Period** Acceleration drills.

**Fifth Period** First exercise, page 101.

### SECOND LESSON

**First Period**
(a) Review mechanical features and take up new features.
(b) Explain new section of the keyboard and drill in locating new letters (first paragraph, page 15).
(c) Assign first exercise.

**Second Period**
(a) Assign second exercise.
(b) Assign the words of this exercise to be written once each in the order given as a concentration exercise. This plan should be a part of all the fingering exercises that follow.

**Third Period**
(a) Assign third exercise.
(b) Assign the words of the second exercise to be written once each in the order given.
(c) Assign supplementary exercise.

**Fourth Period** Acceleration drills.

**Fifth Period** Second exercise, page 101.

### THIRD LESSON

**First Period**
(a) Brief review, and new mechanical features.
(b) Take up new fingering division and drills.
(c) Assign first exercise.

**Second Period** Assign second exercise.

**Third Period**
(a) Assign third finger practice.
(b) Assign supplementary exercise.
(c) Use third exercise on page 102 if time permits

**Fourth Period** Acceleration drills.

**Fifth Period** Third exercise, page 102.

### FOURTH LESSON

**First Period**
(a) Review, and new mechanical features.
(b) New finger division.
(c) Assign first exercise.

**Second Period**
(a) Assign second exercise.
(b) Give concentration exercise, as outlined for second lesson.

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| | | |
|---|---|---|
| **Third Period** | (a) | First supplementary exercise. |
| | (b) | Second supplementary exercise. |
| **Fourth Period** | | Acceleration drills. |
| **Fifth Period** | | Fourth exercise, page 102. |

### FIFTH LESSON

| | | |
|---|---|---|
| **First Period** | (a) | Review division of the keyboard and locations. |
| | (b) | Take up new finger division; drill on locations. |
| | (c) | Assign first exercise. |
| **Second Period** | (a) | Assign second exercise. |
| | (b) | Give concentration drill, as previously suggested. |
| **Third Period** | (a) | Take up capital letters and drill thoroughly on shift-key. |
| | (b) | Assign supplementary exercise No. 2. |
| **Fourth Period** | (a) | Review and drill on keyboard and capitals. |
| | (b) | Assign supplementary exercise No. 1. |
| **Fifth Period** | | Fifth exercise, page 102. |

### SIXTH LESSON

| | | |
|---|---|---|
| **First Period** | (a) | Review and drill. |
| | (b) | New features of machine. |
| | (c) | First exercise. |
| **Second Period** | (a) | Concentration exercise on first exercise. |
| | (b) | Second exercise. |
| | (c) | Speed drill. |
| **Third Period** | (a) | Concentration exercise on second exercise. |
| | (b) | Supplementary exercise, page 23. |
| | (c) | Speed drill. |

(NOTE: The work on "Characters Not on the Keyboard" should be deferred until "Business Correspondence" is reached.)

| | |
|---|---|
| **Fourth Period** | Speed drills on alphabet and alphabetic sentences. |
| **Fifth Period** | Sixth exercise, page 103. |

### SEVENTH LESSON

| | |
|---|---|
| **First Period** | First assignment. |

(NOTE: The instruction for preparing this lesson (page 25) should be carefully read and followed. It will be seen that the "Exercises" are not to be written as presented, but as instructed.)

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**Second Period**
(a) Drill on numeral keys.
(b) Second assignment.

**Third Period**
(a) Review numeral locations.
(b) Third assignment.

**Fourth Period**
(a) Fourth assignment.
(b) Concentration exercise.
(c) "Numerals," page 25, to be studied but not written; follow by quiz the following day.

**Fifth Period**
Seventh exercise, page 103.

## EIGHTH LESSON

(NOTE: Follow seventh lesson instruction for assignment.)

**First Period**
(a) Acceleration drills on alphabet and alphabetic sentences, third exercise, seventh lesson.
(b) Review numeral keys.
(c) First assignment.

**Second Period**
(a) Drill on new characters.
(b) Second assignment.

**Third Period**
(a) Review new characters with drill—second group, second exercise.
(b) Third assignment.

**Fourth Period**
(a) Concentration and acceleration drills.
(b) Fourth assignment.
(c) "Numerals" treated as in seventh lesson.

**Fifth Period**
Eighth exercise, page 104.

## NINTH LESSON

Treat as the seventh and eighth lessons—four periods. The fifth period will be devoted to the ninth exercise, page 104.

"Spacing after Punctuation Marks" discussed.

## TENTH LESSON

(a) Treat as ninth lesson, after reading the instructions.
(b) "Things You Ought to Know"—study and quiz.

(NOTE: Four periods required. The fifth period will be used on the tenth exercise, page 104.)

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### ELEVENTH LESSON

| | |
|---|---|
| **First Period** | (a) Speed drill on alphabetic sentences.<br>(b) First exercise, as instructed. |
| **Second Period** | (a) Speed drill.<br>(b) Second exercise.<br>(c) "Things You Ought to Know"—study and quiz. |
| **Third Period** | One copy of page 33. |

### TWELFTH LESSON

| | |
|---|---|
| **First Period** | Exercise, page 36. |
| **Second Period** | One copy of "Things You Ought to Know," page 35. |

## SPEED DRILLS

At this point in the student's work it would be well to introduce fourteen periods of continuous speed drills on straight matter beginning with simple matter and gradually increasing in speed. The purpose of this is to give the student a continuous working speed on straight matter before he encounters the problem of arrangement of business letters. The attention that will be necessary in studying the forms and arrangement of business letters will absorb much of the student's effort, and if he has not laid the foundation for effective work in continuous writing he will become discouraged. If, on the other hand, he has acquired a good style of technique in the operation of the keyboard, he has transferred the manipulation of the keys to the automatic stage and he is left free to concentrate his whole attention on form and arrangement.

The speed drills should begin with simple paragraph work and the length of the exercise then gradually increase, until toward the end of the fourteen periods when practically a whole period will be taken in making one copy of the matter assigned for practice. For this purpose the "Speed Studies" in the Medal of Honor Edition may be used by the teacher. This may be supplemented by material from "Shorthand Dictation Drills," or from "Constructive Dictation."

The best method of conducting the speed drills is to point out the difficult words to finger in any "speed study" and have the student practice each of these a few times until he has mastered the difficulties of the individual fingering. Then the entire exercise should be assigned for practice a given number of times or for a certain length of time. The next step is to test the entire group on the "speed study" to ascertain whether or not the required speed has been attained. No effort should be made to keep the student on the "speed study" until he has memorized it.

### THIRTEENTH LESSON

**First Period** Discuss the points on pages 37, 38, 39, 40 and illustrate. The teacher may use some of the simple business letters from "Gregg Speed Studies" as an introduction to arrangement.

**Second Period**
(a) Review points of first period.
(b) Assign first exercise.

**Third Period**
(a) Review points of first period.
(b) Assign second exercise.

### FOURTEENTH LESSON

**First Period**
(a) Discuss "Suggestions for the Typist" and "Making Enclosures."
(b) Continue speed drills on alphabet and alphabetic sentences, at beginning of period's typing.
(c) First exercise.

**Second Period**
(a) Discuss new topics.
(b) Second exercise.

**Third Period**
(a) Discuss new topics (page 46).
(b) Third exercise.

**Fourth Period**
(a) Speed drills.
(b) Fourth exercise.

**Fifth Period**
(a) Speed drills.
(b) Fifth exercise.

**Sixth Period**
(a) Speed drills.
(b) Sixth exercise.

**Seventh Period** Seventh exercise.

### FIFTEENTH LESSON

**First Period**
(a) Study first exercise, page 52.
(b) Make one copy of the first exercise, page 52.
(c) Start addressing of envelopes, first exercise, page 54.

**Second Period**
(a) Finish addressing envelopes, page 54.
(b) Study illustration, page 55.
(c) Make one copy of page 55 with envelope.

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**Third Period** (a) Discuss third exercise.

(b) Copy telegraphic messages, page 57.

(NOTE: Telegraphic blanks should be used. The teacher can add to the work of this lesson by supplying data for other telegrams, which should be written on telegraphic blanks. See "Office Training for Stenographers.")

### SIXTEENTH LESSON

**First Period** (a) Study page 58.

(b) First and second exercises, page 59.

**Second Period** Third exercise.

(NOTE: Before assigning the third exercise discuss Rough Draft, and impress upon the students the necessity for making all corrections. The rearrangement of a sentence may make an improvement. Paragraphing, punctuation and spelling to receive careful consideration.)

**Third Period** Fourth exercise.

**Fourth Period** Fifth exercise.

### LESSONS SEVENTEEN TO TWENTY-EIGHT (Inclusive)

**Twenty-four periods. Each lesson will require two periods on an average.**

The student, by the time he has reached the seventeenth lesson, should be far enough advanced in shorthand to begin making transcripts. Consequently, only part of the day's work will be assigned to typewriting from copy. There is enough material in each of the lessons following to take part of a period only, as it is assumed that if the student has gone over the work in the foregoing lessons thoroughly, he will have a typing speed that will enable him to copy any of these papers quickly. The main object in presenting these is to familiarize the student with the form. The reduction of the amount of matter gives more time for transcribing.

### LESSONS TWENTY-NINE TO THIRTY-THREE (Inclusive)

The same method can be pursued in handling these lessons as in the preceding section—Lessons seventeen to twenty-eight. Ten periods required.

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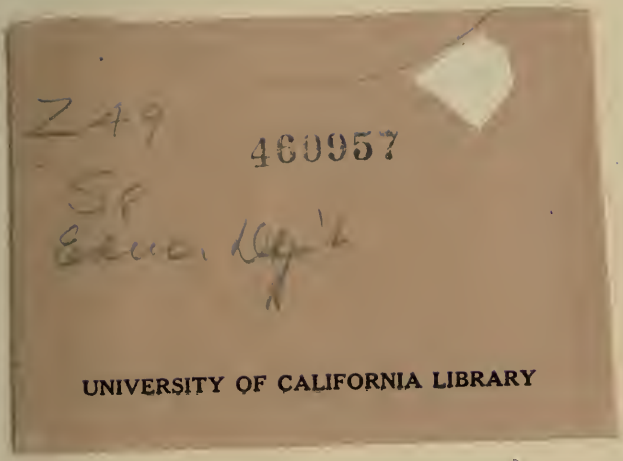


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